

BBC forced to cut education plans

by Felicity Jones

The expansion of continuing education programmes to fill BBC's now vacant afternoon slot have had to be abandoned indefinitely due to the extra burden of breakfast television, rising programme production costs and the expenses of American films.

The BBC hoped that the shifting this week of schools, Open University and some continuing education programmes to BBC 2 during the daytime from 9pm to 3pm would release time amongst other things for "educational" programmes for general adult consumption of the kind produced by the continuing education department. Instead a mixed collection of low-cost repeats and films has had to fill the slot.

The dilemma for the BBC of its fixed income funding means that the corporation finds itself unable to even consider such an expansion until the next three-year financial cycle at least.

Mr Brian Wenham, BBC head of television, said at a launch of this season's new continuing education programmes, that some developments including a series for the unemployed had had to be shelved.

With three million unemployed now added to the traditional audience of afternoon television, Mr Wenham said that he thought that it was potentially a significant market for "less direct" educational programmes. "But we would be talking about a financial outlay going into six or seven figures which is just not feasible for us at the moment", he said.

He did not rule out the possibility, however, that the as yet sketched plans to expand continuing education might bear fruit in the next financial cycle.

Cuts method is attacked

The Inner London Education Authority has replied to the National Advisory Body's proposals for a £5m cut in London's funding in 1984/85 with an attack on the planning methods used to calculate the figures.

The Inner London letter to the NAB comments that the authority's "realistic assessments" of the number of students who could be accommodated after a 10 per cent cut in resources was not comparable with the body's decision to allocate resources per student on the basis of "bids".

"This radical change in perspective is incompatible with the concept of a considered forward planning exercise; bad our institutions been asked to respond within this framework, their answers would have been quite different," the ILEA letter says.

The letter also criticizes the data base and the method of calculation used by the NAB, as well as its apparent consequence of transferring students away from the south-east and into smaller colleges.

In the light of this, the letter says, the authority was resubmitting new proposals, some maintaining original plans, some targets and others increasing them. It expresses support for town planning and nautical studies - recommended for closure by the NAB at Central and City of London polytechnics respectively - for art and design, where the NAB recommended London degree courses in the four colleges to decrease from 18 to 12; and for part-time work.

The ILEA's further and higher education sub-committee, which met this week to draft the letter, heard from officials that the £5m cut would be almost wiped out if the NAB made allowances for London costs and had not decided to exclude "further funding" - additional money for institutions with special needs - from the 1984/85 pool.

Responses to the NAB from each London college were also attached to the ILEA letter. All five polytechnics ask for increases in resources, and Thames Polytechnic stresses that the original NAB calculations for it were based on wrong calculations.

Many of the colleges also submit increased numbers, while the joint submission of the four art colleges - Central, Camberwell, Chelsea and St Martin's - says that student numbers could be increased as demand is high.

One of the casualties is a proposed series of special interest to the unemployed as well as the more general viewer.

A pilot programme for the series on Liverpool went out this week in *Afternoon Out*. Mr John Radcliffe, acting head of continuing education, said that the aim was to give a strong regional flavour to what it was like to be unemployed as seen from a Liverpoolian's point of view with a look at the new enterprises workshops designed to attract new business to the dockland.

He said that the BBC was still hoping to use the programme as a pilot "if and when the finances become available. In the meantime the department has used the one-off programme to test audience reaction to this sort of programme."

Another series for unemployed young people starting in November in the evenings on the techniques of rock music has escaped unscathed. *Rock school* lets experienced musicians such as John Entwistle from The Who teach an audience of young aspiring musicians.

The series is an attempt to overcome the difficulties in attracting the attention of the "disaffected" 16 to 19 age group through the medium of rock music.

The Computer Literacy Project is moving into "live" television with a 115 minute programme called *Micro Live* scheduled for October 2 in which there will be live demonstrations, a phone-in and on the spot program writing. The BBC received 300,000 referrals for further courses at colleges and general information following its computer programmes.

Allegations dismissed

by Olga Wojtas
Scottish Correspondent

Allegations of impropriety in the appointment of the chairman of the Scottish Institute of Adult Education as a paid official of the Institute were dismissed at a meeting of its council this week.

There had been disquiet among several council members, who complained that Dr Elizabeth Gerver, the newly appointed director, had helped select the interviewing panel for the directorship.

And there were also complaints that Dr Gerver, a lecturer in communications at Queen Margaret College in Edinburgh, was chairman of the Institute at the time of her interview.

However, this week's meeting heard that Dr Gerver decided to apply for the post several weeks after the panel was selected, and withdrew from it before its first meeting.

The meeting also heard that Dr Gerver had sought advice from the Scottish Education Department on whether it would be proper for her to apply for the post, and was told it would be. Dr Gerver had immediately offered her resignation, but this was not accepted.

Meanwhile, an unsuccessful female candidate for the post is taking out an action against the ILEA, alleging sex discrimination, although two women were on the short list.

Dr Valerie Wilson, (senior lecturer in Edinburgh University's extramural department), who is husband's editor of *STAB Journal*, claims she was not included on the short list despite having comparable and similar experience to those who were.

Responses to the NAB from each London college were also attached to the ILEA letter. All five polytechnics ask for increases in resources, and Thames Polytechnic stresses that the original NAB calculations for it were based on wrong calculations.

Many of the colleges also submit increased numbers, while the joint submission of the four art colleges - Central, Camberwell, Chelsea and St Martin's - says that student numbers could be increased as demand is high.

Responses to the NAB from each London college were also attached to the ILEA letter. All five polytechnics ask for increases in resources, and Thames Polytechnic stresses that the original NAB calculations for it were based on wrong calculations.

Many of the colleges also submit increased numbers, while the joint submission of the four art colleges - Central, Camberwell, Chelsea and St Martin's - says that student numbers could be increased as demand is high.

Responses to the NAB from each London college were also attached to the ILEA letter. All five polytechnics ask for increases in resources, and Thames Polytechnic stresses that the original NAB calculations for it were based on wrong calculations.

Many of the colleges also submit increased numbers, while the joint submission of the four art colleges - Central, Camberwell, Chelsea and St Martin's - says that student numbers could be increased as demand is high.



Mr Bob Dunn: no more "borderlines"

'Get tough' says Dunn

Examiners of trainee teachers should take a tougher line in final examinations, the education under-secretary, Mr Bob Dunn, told a weekend conference.

Too many "borderline" teachers training students seem to have been given the benefit of the doubt in the past by well-meaning examiners - to the detriment of the profession, he said.

Mr Dunn told a University of Leicester conference on the postgraduate certificate in education that some newly-trained teachers were being placed in jobs before they were ready for them.

"The time has come to seek out good practice and provide conditions for it... to build on the strength of the system so that students are given maximum opportunity to develop potential as teachers and for employers to know broadly what they might expect from an applicant with particular qualifications."

The Government is supporting another research programme at Cambridge, which is monitoring and evaluating four PGCE examples. At the same time, the Secretary of State for Education, Sir Keith Joseph, is considering a report on teacher training courses submitted by the Advisory Committee for the Supply and Education of Teachers.

Both ACSET and the Government placed considerable emphasis on practical experience - both for students and teacher trainers, Mr Dunn said.

Mr Dunn also commented on the Government's decision to scrap the National Scholarships for Priority Teachers scheme, introduced just over a year ago.

The scheme was set up on a two-year pilot basis in response to a shortage of teachers in key subject areas.

He told the conference the scheme had failed in its objective of recruiting to teaching good candidates who would otherwise have gone elsewhere and said the aim now was to improve the quality of teaching through effective in-service training.

Mr Dunn also commented on the Government's decision to scrap the National Scholarships for Priority Teachers scheme, introduced just over a year ago.

The scheme was set up on a two-year pilot basis in response to a shortage of teachers in key subject areas.

He told the conference the scheme had failed in its objective of recruiting to teaching good candidates who would otherwise have gone elsewhere and said the aim now was to improve the quality of teaching through effective in-service training.

Mr Dunn also commented on the Government's decision to scrap the National Scholarships for Priority Teachers scheme, introduced just over a year ago.

The scheme was set up on a two-year pilot basis in response to a shortage of teachers in key subject areas.

He told the conference the scheme had failed in its objective of recruiting to teaching good candidates who would otherwise have gone elsewhere and said the aim now was to improve the quality of teaching through effective in-service training.

Mr Dunn also commented on the Government's decision to scrap the National Scholarships for Priority Teachers scheme, introduced just over a year ago.

The scheme was set up on a two-year pilot basis in response to a shortage of teachers in key subject areas.

He told the conference the scheme had failed in its objective of recruiting to teaching good candidates who would otherwise have gone elsewhere and said the aim now was to improve the quality of teaching through effective in-service training.

Mr Dunn also commented on the Government's decision to scrap the National Scholarships for Priority Teachers scheme, introduced just over a year ago.

The scheme was set up on a two-year pilot basis in response to a shortage of teachers in key subject areas.

He told the conference the scheme had failed in its objective of recruiting to teaching good candidates who would otherwise have gone elsewhere and said the aim now was to improve the quality of teaching through effective in-service training.

Mr Dunn also commented on the Government's decision to scrap the National Scholarships for Priority Teachers scheme, introduced just over a year ago.

Science policy unit's future is assured

by Paul Flather

The Science Policy Research Unit based at Sussex University is about to receive a double boost which will both guarantee its future and allow it to expand two important research programmes.

Sussex has just agreed to fund two new readerships at the unit and to continue support of the Reginald M. Phillips chair held by Professor Chris Freeman. The unit also received one "new blood" post this year.

The Social Science Research Council also intends to allocate £150,000 a year for each of the next four years, effectively converting the SPRU into one of its designated research centres. As such the unit's progress would be reviewed after four years and again after eight.

The package still needs final approval, but it comes at a critical time in the unit's development, despite a general 20 per cent cut at Sussex over two years and severe cuts in the SSRC's budget.

The unit currently employs 40 researchers and 10 support staff with an annual budget of about £700,000. Sussex provides 10-15 per cent of the budget and the rest is earned in external contracts.

The unit was set up in 1966 with the aim of carrying out problem-oriented research involving the history, economics, sociology and politics of science, technology and innovation. It is particularly interested in how research and development interacts with the rest of society.

It has built a strong reputation and recent years visiting delegations from Government departments, including the Cabinet Office, have become common. Fellows from the unit have advised several Parliamentary committees.

Professor Geoffrey Oldham, the unit's director, said the moves would give the SPRU the measure of security it was seeking and allow it to further develop its work. "This is all marvellous news for us at a time of great cutbacks."

The SSRC money is earmarked for two programmes - energy research and industry and technology, and it hoped some new posts might follow. The SSRC is also supporting Professor Freeman for three years until he retires, allowing the chair to be refilled immediately.

One new readership is being created with central restructuring money specifically to encourage wider European links. The university's support is a request left by Sir Reginald Phillips, a back science policy research at Sussex.

It will be seen as significant that the SSRC is so keen to support the SPRU despite its existing commitment to the Technical Change Centre, its annual budget has fallen more than 30 per cent in five years.

Devon faces YTS cash crisis

The Education Secretary has refused help to local authorities facing an education spending crisis over the Youth Training Scheme. He said they must get by until next year's grant support grant negotiations for 1984/85.

A delegation from Devon County Council, which has been left with a heavy deficit because the Manpower Services Commission is not taking up all the YTS places it asked for, was told by Sir Keith Joseph on Tuesday that some other authorities seemed to be in a similar plight, but that there could be no question of relaxing the over-spending penalty rules for anyone this year.

Devon will now have to decide whether it will accept the deficit, which means pushing its spending further into the penalty zone, or make cuts in YTS provision which will force it to turn away some of the trainees whom the MSC is still willing to provide.

Meanwhile, cash economies are being undertaken at Exeter College to save off a threat of immediate staff redundancies. The college has been told that it must eliminate a current overspending of £110,000 a year, as distinct from the £135,000 loss which the council recognizes is attributable to the YTS.

The college lecturers' union has launched a strong attack on government warnings that material taught in Youth Training Scheme youngsters must not be political.

Mr Mick Farley, assistant secretary for further education in the National Association of Teachers in Further and Higher Education, has written to the Manpower Services Commission saying that Government intervention in the teaching content is unacceptable.

The chairman and chief officer of NAB Mr Christopher Ball and Mr John Bevan respectively.

Most institutions had responded to the CNA before the meeting, even though there was only a three day gap between Dr Kerr's letter and the meeting went through the NAB recommendations for every college, members did not comment on recommendations in the majority of cases. Threatened courses that did elicit strong support included the town planning courses at Central London and Coventry (Lancaster) polytechnics.

A small but vocal caucus of unattached members of the council (who are not members of RIBA) are planning to use the special meeting to try and bring ARCUK back abruptly to its educational responsibilities before the NAB/UGC working party makes its recommendations.

Mr Tom Wooley, an unattached council member, said that they hoped to try and ensure that NAB consults a cross-section of people on ARCUK who represent the different points of view of the profession.

He said: "It is clear that when the Government set up ARCUK it was to represent the public as well as the professional interest. At the moment interests are being made known to NAB/UGC and we want to draw attention to that," he said.

A keynote paper by Professor John Tam, Roscoe professor of architecture at the University of Liverpool and chairman of ARCUK's board of education, which is to be presented to the meeting is to be convened.

Responses to the NAB from each London college were also attached to the ILEA letter. All five polytechnics ask for increases in resources, and Thames Polytechnic stresses that the original NAB calculations for it were based on wrong calculations.

Many of the colleges also submit increased numbers, while the joint submission of the four art colleges - Central, Camberwell, Chelsea and St Martin's - says that student numbers could be increased as demand is high.

Colleges face new approvals system

by John O'Leary

Polytechnic and college courses will have Government approval withdrawn en masse and replaced by a new system of programme approvals if the committee of the National Advisory Body agrees at its meeting next week.

The NAB board has recommended bringing the approvals system into line with the 14 groups of subjects which form the programmes used in the current planning exercise. The change would take place next year, affecting both existing courses and new starts.

Restrictions on new submissions would be eased under the new arrangements, although institutions will still be held to target numbers for degree level and full-time students. They would also be required to register all new course proposals and withdrawals from the NAB.

Legal advice provided by the Department of Education and Science was that the new system would not require legislation and could be achieved by revoking approval for all advanced courses and simultaneously approving the system authorized by the Secretary of State.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

The change was recommended both to take account of the NAB's new system of programme funding and as a result of criticism of the existing arrangements, which were described as cumbersome in a paper for the NAB.

If the new system is adopted, regional advisory councils will be asked to monitor and advise institutions on part-time provision, as well as giving the NAB advice on where intervention is necessary. Talks will be held in the DES and the validating bodies to agree the details of the new system.

Edinburgh Conversations defended

by Olga Wojtas
Scottish Correspondent

It was four years ago that the distinguished journalist Lord Ritchie Calder led a small Scottish delegation to the Soviet Union for some informal East-West talks.

The ensuing annual meetings have been dubbed the "Edinburgh Conversations", since they have been set up largely through Professor John Erickson, head of defence studies at Edinburgh University, and until now they cannot be said to have attracted much media interest, despite being attended by noted and influential delegates from both sides.

The 1981 Conversations, which led to a call from both sides for nuclear arms limitations, received some coverage and the 1982 meetings, which agreed that conventional forces must be discussed alongside nuclear weapons, received even less.

But this year's Conversations have suddenly been designated a national issue by MPs and the media, following the shooting down of the South Korean airliner by the Soviet Union.

Soviet delegates sightseeing in Edinburgh have been pursued by press photographers, and there have been allegations that the university is using taxpayers' money for their visit. In fact, the Russians have paid for their own travel and accommodation costs, and the university costs are being met through private funding.

Junior Foreign Office minister, Mr Malcolm Rifkind, has called the university "unwise to hold the talks," "given that it can be used for propaganda purposes by the Soviet Union."

Flower, ministers did not comment last year, when Edinburgh's principal, Dr John Burnett, Field Marshal Lord Corser and General Sir Hugh Beach were among the team which visited Moscow shortly after the Soviet invasion of Afghanistan.

Principal Burnett has defended continuing the Conversations. The British delegates did not mince their words when they discussed Afghanistan, he has said, and he had no doubt that the airline incident, which he described as "barbaric" would be discussed this year.

"It is not for us to ask the Russians to explain it. The question is how did it arrive, what is the kind of thinking

ing University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

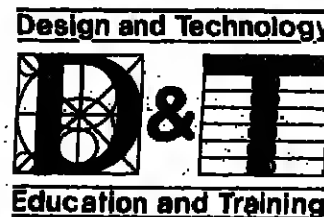
They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Reading University and honorary chairman of the University, College and Professional Publishers Council; Dr Richard Hoggart, warden of Goldsmiths' College, London on behalf of the academic writers groups of the Society of Authors; Mr Norman Higham, librarian at Bristol University and chairman of the Library Association; and Mr Giles de la Mare, director of Faber and Faber, and chairman of the UCPF.

They point out that real spending by libraries in higher education institutions has more than halved in 10 years, and cite the Royal Society's fears that new academic research and materials may cease to be published.



Wembley
Conference Centre
London
13-15 October 1983
9.30-5.30 (Sat 5.00)



Wendy Lees (above) is working on a set of very large wall hangings commissioned for the Elvin Hall at the London University Institute of Education. The hangings take the themes "Spring into summer" and "Autumn into winter" and will be on view after October 18 at the Institute, 20 Bedford Way, London WC1.

Council demands a say in architects' training

by Felicity Jones

The Architects' Registration Council (ARCUK) is to hold a special meeting on education policy next week in a final attempt to challenge the authority of the Royal Institute of British Architects in the debate over architectural education.

Few practitioners, let alone outsiders,

Research councils face efficiency drive

by Jon Turney
Science Correspondent

Cost-cutting proposals for four of the five research councils have now been approved by Sir Keith Joseph, Secretary of State for Education and Science. The proposals, on stores, purchasing, estate management, workshops and library services, stem from separate scrutinies of the four councils under guidance from the Whitehall efficiency unit originally set up by Sir Derek Rayner. A composite report drawing on these reviews is published this week, with endorsement from Sir Keith.

The report estimates that the Agri-

cultural, Medical, Natural Environment and Science and Engineering research councils could save £3.3m a year and shed 211 jobs if all the recommendations are followed. This would be on top of a single saving of £5.3m from stores reorganization and sale of property.

Sir Keith has written to the heads of the four councils asking them to submit proposals for action on the recommendations in the original reviews by the end of November. Many of the proposals are opposed by research council staff.

The most controversial single proposal, the sale of Hermonium Castle at the Royal Greenwich Observatory's site owned by the SERC, is to be

considered by a special panel set up by the council of astronomy, space and radio board. The council argued that this suggestion should not be taken with the others as it had longer-term scientific implications.

The composition of the panel will be decided at a board meeting this week and it will report in time for the SERC's forward look next year.

Sir Keith has also asked for responses by next April on four more general suggestions to the four councils. These are for a new management audit; cross-charging of support services to reduce menies simply charged to overheads in an institution; and "proposals to incorporate an assessment of the value for money obtained

from research projects" in council reviews of different institutions' research programmes.

The last suggestion appears to raise particularly delicate issues about scrutiny of the conduct of research. It is understood to mean that review groups should consider whether research underway in council laboratories is being done in the most cost-effective way. Council staff have not yet had time to think how to do this.

Dr Keith Aldred, finance officer for the NERC, said this week that if the suggestion implied precise measurement it would be very difficult. "We will need to talk to the scrutiny team and see what they have in mind," he said.

Expertise in short supply

by Paul Flather

The Government is desperately in need of expertise in international relations and should support an open market in international conference on peace and peace studies was told this week.

Professor Paul Wilkinson, of the University of London, said many of the "new right" politicians and industrialists favoured the more utilitarian subjects such as electronics, computers and accountancy.

"They tend to regard studies such as international relations and history as missive, not only because they are not used for them in practical terms, but because these subjects are seen as inherently or potentially subversive."

Professor Wilkinson, giving a paper on the teaching of the history of conflict, said it was naive to think the present British Government was committed to a pluralistic competition of open market in knowledge and on foreign affairs.

"They should do because the Foreign and Commonwealth Office, ministers, and the government bureaucracy as a whole, are in reality desperate for expertise on many areas of the world and aspects of international relations."

He was giving a paper on the opening day of a three-day conference at Christ Church College, Oxford, bringing together academics, defence experts from a number of countries, and civil servants, to review curricula and course development in peace and conflict studies in the UK.

Professor Wilkinson said there was now wide agreement that the history of conflict should be an important part of curricula in history, social studies, and international relations. But such subjects are at risk.

The greatest challenge facing international relations teachers was the "demythologizing of the history of conflict" from nationalist bias and prejudice, and from ideological "visionism".

They needed to guard against overstatement of their work by propaganda, by preserving the academic freedom and independence of universities and colleges, by striving for objectivity, by comprehensive use of sources, and by studying more carefully the impact of ideologies on history.

He noted the emerging problems with shortage of people with necessary language skills to help in the translation of foreign materials. Shortage of Russian language experts in Britain and North America was now a "great deficiency" he said.

Other papers at the conference dealt with the role of defence and studies institutes, peace studies schools, the teaching of "peace values", and the importance of "peace studies".

The department asked the committee in a letter whether it would be prepared to recommend which districts would be best able to afford the £40,000 clawback announced by the government early in the summer.

Some of the WEA districts are known to be in financial difficulties and would be forced to make further cutbacks and increase fees if the clawback were imposed across the board.

For this reason, the national committee has agreed to make a response to the department's letter and to provide some kind of recommendation about which of the 15 districts can afford a cut in budget.

Majority vote sets seal on merger

by Karen Gold

The United Kingdom's first polytechnic-merger is to go ahead following a second 95 per cent majority vote in the New University of Ulster in favour of merger with Ulster Polytechnic.

The two votes—the first was in July—overcame the legal obstacles to the merger, to effect they disband NUU by calling for a joint petition with the polytechnic to the Queen for a new joint charter, and to form by the 1984/85 academic year a new institution to be called the University of Ulster.

The petition, draft charter and statutes are all due to go to the Privy Council by the end of September. Next month a proto-council for the new institution will be set up, in order to carry out detailed planning and to answer trades union protests that they have no employer with whom to negotiate.

Both institutions' 1984 prospectuses have been issued with a joint statement informing applicants of the likelihood of the merger.

Mr Nicholas Scott, under secretary of state for Northern Ireland who is responsible for education in the province, gave some last minute financial encouragement to the NUU court and the merger in a statement to the Northern Ireland Assembly's education committee.

As well as reaffirming his original promise that the institution would be funded at the 1983 joint level of NUU and the polytechnic updated for inflation in 1984, and not ruling out additional funding for 1985, he offered solutions to the severe financial problems threatened by superannuation

arrangements in the new institution. At the request of Sir Peter Swinnerton-Dyer, chairman of the steering group overseeing the merger, he said he would be sympathetic to the need for an additional £360,000 to pay for transferring public sector academic staff from their pension scheme to the universities' one.

That would cover the difference between the employer's contributions to the schemes. The once and for all cost of the transfer—rumoured at between £6m and £15m—would be found from within the public sector pension scheme and would not be a charge on the new institution or the Department of Education.

But the difference in salary scales between polytechnic and university staff—calculated at a cost of between £150,000 and £180,000—would have to be found by the new institution.

Mr Scott also defended the competition of the University Grants Committee working party on Northern Ireland, telling the committee chairman Mr John Cusack that criticisms that it had too few Ulster members were premature.

In a veiled attack on the House of Commons Select Committee report on the merger, which recommended a freestanding institution in Londonderry based at Magee University College, which is part of the new institution, he said: "I cannot overemphasize the importance that I place on Magee being a good strong part of the new institution... I think if the new institution were to come back to me and say they needed extra funds because of the special needs of Londonderry, I think I would look at that very sympathetically." Leader, back page

College row over councillor

The education convenor of Tayside Regional Council, Mrs Barbara Vaughan, has resigned from her post at Dundee College of Technology after a longstanding dispute over her working hours.

She has officially resigned for "personal reasons" but it is understood she felt she needed more flexibility in her college timetable in order to carry out her council duties.

The vice principal, Dr David Kennedy, said the college was prepared to offer Mrs Vaughan a half-time contract of 16 hours a week as opposed to her spending four fifths of her time in college as had happened since she took over the convenership last summer.

"The college had to insist on the essential principle that we must know in advance when she would be in the

college and when she would not," he said.

Dr Kennedy added that there had been a deadline on Mrs Vaughan's acceptance of the half-time contract, but when this passed, the college assumed she intended to stay on her present contract, and heard nothing further until her letter of resignation arrived.

Mrs Vaughan was reluctant to comment on the details of the dispute, but said: "The situation has almost got to the point where, unless you have an extremely sympathetic employer, it is impossible to hold down a full time job and fulfil one's public responsibilities adequately, or, if one tries to, the pressures run off both on one's work and on one's public duties."

EEC plan to fund research

The European Commission plans to launch a new technological research programme and is inviting British industry, research laboratories and universities to take part. If approved, the new scheme will grant up to half the cost of basic research projects from early next year.

The EEC's aim is to promote research which, although still in the pre-competitive stage, shows clear industrial objectives. The commission says it will be looking for strong industrial commitment and funding, and for projects which involve organizations from at least two member states.

Private companies, research associations, universities and government laboratories will be eligible, but funding arrangements will vary from case to case. Normally, they will not exceed 50 per cent of costs.

The main areas of research proposed for the EEC programme are: surface science and technology; laser technology; joining techniques; new testing methods; CAD/CAM and mathematical models; polymers, composites and other new materials; membrane science and technology and finally, catalysis and particle technology.

The commission will receive declarations of interest until late September, and a seminar to discuss the programme is to be organized by the Department of Trade and Industry.

Academics remember 'missionary'

Leading academic figures paid their respects to one of the most-respected post-war "missionaries" in adult education at a one-day commemorative conference at the University of Kent to mark the setting up of the Tony McLean Memorial fund and chair.

Among the names of pupils and fellow tutors who have subscribed to fund a still in a place a part of the process of social change in society.

Access to education was, it was true to say, still not just a matter of the available intelligence but a lottery.

Dr Elizabeth Monkhouse, deputy

First: choose your problem...

by Jon Turney
Science Correspondent

Choosing your problem is as important a skill as any other in research and two distinguished scientists last week offered advice on making fruitful choices.

Sir Hermann Bondi, chairman of the Natural Environment Research Council emphasized how slim the chances are of finding a worthwhile problem to tackle. Speaking at a conference organized by the Science, Technology and Society Association on the theme of choice, he estimated that in pure, theoretical science, where problem choice is free, 80 per cent of problems are insoluble and 94 per cent are trivial.

"It is always the task of the academic to spot the half per cent where some headway can be made," he said.

Professor Martin Rees of Cambridge University agreed that students choose-

ing research problems had to be guided towards projects that were non-trivial but still manageable. In his field of theoretical astronomy, it was also essential to avoid the lure of fundamental problems which were not ripe for solution. "The people who fall most deeply into this theoretical trap are those we call cranks," he said. They tried to build a world-view from scratch without taking account of anyone else's work. The best way to deal with cranks was to get them to write to each other, he suggested.

More seriously, there was a milder form of the disease, common among the brightest undergraduates—a conviction that only the real fundamental problems were worth tackling. They should multiply the importance of the problems by their chance of making any impact on it, Professor Rees advised.

He also tried to point students towards problems suited to their indi-

vidual styles of thinking. In astronomy, for example, projects varied widely in their calls on mathematical, physical and computing skills.

Once a tractable problem had been chosen, it was unlikely that outstanding brilliance was needed to make a contribution to the field. "The person who invented the zip fastener made as much of an intellectual leap as most theoretical physicists," he said.

Sir Hermann put these decisions in choice of theoretical problems at one end of a spectrum, the end where public involvement in selection should be kept to a minimum. He recognized the right of the taxpayer to have a say, but the sums put aside for pure or cultural research needed as little public involvement as choice of pictures for the National Gallery. "This is scientists' science," he said. Academic freedom meant appointing people on their track record of successful problem choice and then leaving them free to choose their own work.

Slump in book prices 'shortlived'

by Paul Flather

Academic books prices appear to have fallen during the past six months against all recent trends, according to the latest six-monthly survey.

But researchers at the Centre for Library and Information Management based at Loughborough University are convinced the reverse is a temporary hiccup caused by a current "clean-up" in the British National Bibliography statistics.

The CLAIM report analyses book prices over the first six months of this year and reveals that while prices have gone up 15 per cent in the last five years to an average of £12.46, in the last six months the average figure has dropped from £14.29.

The surveys are based on the BNB catalogue. In the past six months a significant proportion of books with pre-1982 imprints have appeared in the British Library has made efforts to catch up on all outstanding books which it should receive free by law.

Mrs Lawrie Wood, a research assistant at the centre, said the latest figures had to be regarded with caution. "It is too early to say book prices are definitely dropping. The clean-up in the BNB is definitely having an effect," she said.

The proportion of pre-1982 books is about 35 per cent, with some books dating from 1978 and 1979. These bring down the average price of books.

The latest survey also shows that the proportion of books costing less than £8 has risen from 37 to 49 per cent in the past six months, again reversing a general trend since 1978 when the proportion fell from 51 to 49 per cent.

A pamphlet last year claimed book prices had risen by 74 per cent from 1974 to 1980 while tobacco, fuel, and car prices had risen 150 per cent. Rising paper, print, and binding costs are blamed by publishers.

Courses

Guided Home Study for DEGREES, GCE and BEC

LONDON UNIVERSITY: LL.B., B.Sc., B.A., B.A. (Hons.), French, History, B.O., Diploma in Education.

CAMBRIDGE UNIVERSITY: Diploma in Religious Studies.

100% Over 60% 'O' and 'A' level subjects.

BEC: New specially approved courses for the National Certificate.

For free details and advice, telephone or write to me stating which exam you wish to take.

The Hon. Frank Fisher, CBE, MC, MA, Principal, Dept. B22, Wolsey Hall, Oxford OX2 0PA

Tel: 0865 54211 (24 hours)

Approved CACC

Wolsey Hall Oxford

Universities raise more private funds

The universities reduced their reliance on Government funds significantly in 1981/82, according to statistics published this week by the University Grants Committee.

Income from sources other than fees and exchequer grants rose by 6 per cent over the previous year and by 128 per cent compared with 1976/77. The rising number of overseas students charged the "full cost" also resulted in a big increase in income from fees.

The proportion of recurrent income yielded by research grants held steady after a fall in 1980/81. It represented almost 13 per cent of the total universities' income of £1,720m, with London, Oxford and Cambridge leading the field. Bristol, Southampton and Sussex also received more than 15 per cent of their income from research.

The statistics show the salaries of academic-related staff rising fastest of the five groups listed over the five-year period up to 1981/82. Their pay rose by 121 per cent, while the academics received increases adding up to 115 per cent. Secretarial and clerical workers' pay went up by 37 per cent.

The total number of full-time students topped 300,000, compared with 298,700 in 1980/81, while part-time numbers rose almost 4 per cent to 33,200. Continuing education courses are also shown to have increased, with 440,000 students involved.

University Statistics 1981/82, Volume three—finances, 27.50 from the Universities' Statistical Record, PO Box 130, Cheltenham, Glos.

Electronic aids

An exhibition of electronic aids for disabled people organized by the Handicapped Persons Research Unit at Newcastle Polytechnic was opened this week by Lord Glimanara. Funded by the Department of Industry, it contains both high-technology computer aids and battery-operated ones.

Further information from: Handicapped Persons Research Unit, 1, Coach Lane, Newcastle upon Tyne



'Shock of the new' for art college

Bournemouth and Poole College of Art and Design are close to achieving the impossible with the opening of completely new premises for the college in a couple of weeks.

The £44m building on the Walsdown site is intended to be the first phase of new buildings for the art college and will house the departments of photography, film and television, graphic design and technical and natural history illustration, the library and

administrative block. The opening of the site, planned since 1976, has been delayed by building problems but that has not prevented some profit being made from the sale of top surface shale which was removed in the landscaping of the site.

The decision to build completely new premises for the art college was taken by Dorset County Council as part of its scheme to group all its colleges on the same campus as the Dorset Institute of

Higher Education.

Mr John Murphy, acting principal of the art college, said that the opening of the new building was largely a result of the support of the local authority. He said that the cost of the new building had been met without detriment to any courses.

From left above, Jo Cole, president of the student union, Phil Dyke, architect and Mr Murphy.

WEA agree to decide on cut

The Workers' Educational Association's national executive committee has agreed to cooperate with the Department of Education and Science in helping to decide where a cut in budget can be imposed without harm to the WEA's districts.

The department asked the committee in a letter whether it would be prepared to recommend which districts would be best able to afford the £40,000 clawback announced by the government early in the summer.

Some of the WEA districts are known to be in financial difficulties and would be forced to make further cutbacks and increase fees if the clawback were imposed across the board.

For this reason, the national committee has agreed to make a response to the department's letter and to provide some kind of recommendation about which of the 15 districts can afford a cut in budget.

Graduates get help with a small beginning

A unique venture to help Scottish university graduates set up their own small businesses was launched through Stirling University this week.

Twenty-six graduates will now undergo an 18-week training and development programme valued at £5,000, sponsored by the Scottish Enterprise Foundation, formed at Stirling a year ago and backed by both the public and private sectors.

The graduates' business proposals include computer-assisted learning in schools, a health club, a dance studio

and toy manufacture. Professor Tom Cannon, head of business studies at Stirling, said he was "amazed" by the very high quality of the projects, not only in terms of ideas but also in their business analysis.

He added that response to the project, launched early this year, had been overwhelming. Over 1,000 of the 20,000 graduating Scottish students had attended conferences in each of the Scottish universities and almost 200 preliminary proposals had been submitted. Each university appointed an

enterprise counsellor to discuss students' projects and Professor Cannon praised the time and effort they had spent on the scheme.

Revised proposals, vetted by local panels of university staff, professional firms and local business people were submitted to a national panel chaired by Sir Monty Finniston, which selected 20 proposals involving 26 graduates.

Professor Cannon said one fifth of the graduates on the scheme were female, while at present only two per cent of small businesspeople were

Overseas news

Research projects lose federal funding

from Geoff Maslen

MELBOURNE

Up to 500 research projects in Australia will miss out on federal funding next year despite a 17 per cent boost to the Australian Research Grants Scheme budget. The federal government finances the scheme, which allocates money to Australia's top university research projects.

Altogether 1,000 projects that will get money will receive on average 25 per cent less than the ARGS committee considers adequate. Professor Peter Sheehan, the chairman of the committee, said that requests for \$522m worth of research had been received but only \$52.4m would be available from this federal government. This represented an increase after inflation on only 5 per cent and fell short of the 10 per cent real increase promised by the Labor Party before the election.

Professor Sheehan said he welcomed the increase but it was not enough. "I doubt very much whether some areas of basic research are being met at all in Australia because of the lack of fund-

ing," he said. The scheme had lost its ability to finance big new projects worth more than about \$200,000 and these could no longer get government support. As an example, Professor Sheehan said there was no money for new projects in particle and intermediate energy physics.

The ARGS was set up in 1967 to finance high-cost basic research and since then has been the prime source of income to the cream of Australian scientific research. But in the past 16 years the average value of grants under the scheme has fallen from \$47,000 in today's prices to only \$16,000 last year.

The allocation to the ARGS this year is particularly disappointing to those in the basic sciences because of the continued increases in finance for medical research. Next year, this National Health and Medical Research Council will receive a 28 per cent increase in its funds, bringing the amount it can allocate to \$36m. But the government's decision to provide 50 special research fellowships was welcomed by Professor Sheehan, as the first step in implementing a

pre-election promise to provide 300 awards.

Meanwhile, six of the ten special research centres set up by the former Fraser government in 1981 at a cost of \$16m could face closure at the end of next year.

The federal minister for education and youth affairs, Senator Susan Ryan, has questioned the dominance of medical and cancer research in the centres and has said their future would be reviewed when the initial grant money ran out.

But university academics claimed that any decision to cut off money to the centres would mean that millions of dollars of taxpayers' money had been wasted. The head of one of the centres, Professor MacKenzie of Melbourne University, said half of his team of 50 researchers would lose their jobs if federal money cut out.

The 10 research centres were established by the Fraser government amid considerable controversy in the higher education community. The government made an initial allocation of \$16m to the centres to be spent over three years and indicated that further

grants would be made after 1984.

But Senator Ryan said such of the centres would be assessed on its merits before any more money was provided. She said establishment of its centres reflected the particular ideology of the Fraser government.

She said that while any decision on the future of the centres would be a matter for consultation with those concerned, she did not think the range of research covered by the centres was adequate. "There is a dominance of medical and cancer research and very little in, say, labour market research or research related to new technology and new industries that we are interested in."

In fact, of the 10 centres chosen from 327 applications around Australia, six were in the medical-biological field and they ranged from cancer, nerve cell and genetic research to plant cell investigations.

At the time of the proposal to set up the centres, the Federation of Australian University Staff Associations attacked both the idea of setting up the centres and the choice of those nominated to receive the \$16m.

Scientists face job transfers

Ontario universities will benefit from the provincial government's decision to decentralize its forestry, fisheries and wildlife research operations.

University research contracts expected to replace much of the house research now carried out by the ministry of natural resources. The other government departments already depend heavily on universities in the province for their research needs.

Fifty scientists now employed by the ministry will be affected by the reorganization. They are likely to be transferred, as a group or in disciplinary blocks, to existing academic research facilities or to a new research institution established by the government in cooperation with one or more universities.

The University of Toronto, which recently received \$30m from the provincial government towards the creation of a natural resources centre, is seen as a possible outlet for the expertise released by the ministry. Lakehead University could also benefit.

Filed down

Scholars seeking access to the official personal papers of former United States president Mr Richard Nixon will be told to wait two more months while a former chief of state reviews the material, which, if any, he will objectable for public scrutiny.

The National Archives was to release the 628 cubic feet of papers next week. But Mr Nixon said that the volume of manuscripts and the former president had not yet had the opportunity to adequately review the bulk of them. He said other counsel with the memoranda are entitled to review them and his protests if they release would violate any "rights, privileges or defenses".

Youth review

Sir Richard O'Brien, the chairman of Britain's Engineering Industry Training Board and a former chairman of the Manpower Services Commission, will be part of an OECD team to review Australia's youth policies and programmes in November.

Honorary degree

The oldest university in Europe, Bologna, whose origins date back to 1088, has awarded an honorary degree in medicine to Professor Wilhelm Kohn, who invented the artificial kidney in 1956. Over 250,000 people throughout the world suffering from chronic renal insufficiency owe their survival to his invention.

Back home to the bomb blasts

by John O'Leary

This man who occupies arguably the world's hottest higher education seat returned home this week unsure whether his office had been blown up or when his university would be able to open again.

Professor George Tohmé, president of the Lebanese University, had been in Britain for a fortnight doing biological research and trying to set up new relationships with British universities. His trip, under the auspices of the British Council, provided a well-earned respite from the dangers of life in Beirut but only postponed the difficult decisions he must make about the immediate future of the university. It is needed to be reminded of the problems he would face on his return. Professor Tohmé received a second-hand report while in London that his office had been bombed. He had no idea of the extent of the damage but he joked that he hoped something remained since he had arranged to meet his deputy there for a discussion on the prospects for the start of the new academic year.

Professor Tohmé had been receiving less than optimistic assessments from his daughter of the chances of a prompt start. Regular telephone conversations told of the fighting around Beirut and he resigned himself to the likelihood of another delay. The last academic year could not begin until January, rather than October, because the troubles had caused the previous year to overrun.

Professor Tohmé took over the presidency in 1980, having been at the university since 1969. In 1976 the university was closed for the whole year. In 1981 the main Zakhali campus was badly damaged; in 1982 it was Tripoli's turn and then Beirut's. But nothing has shaken his resolve nor, apparently, that of his staff, to maintain high academic standards in the Lebanon.

In 1976, when their house had been hit three times and a close relative killed, the Tohmé family fled to Paris. Mrs Tohmé also an academic, stayed for a year with the three children but her husband returned immediately to plan the reopening of the university.

Since then, like most families in Lebanon, they have known further grief but have adjusted to the new circumstances. A cousin lost both his legs in an explosion. In 1978, for example, but is now in the fourth year of his medical degree.

The university, too, has adjusted. The Council of Ministers has taken over the functions of the old university council but has not interfered with its running so far. It has sanctioned regular sums for the rebuilding work which has now become commonplace as the university buildings are caught in the crossfire.



Dr Tohmé in London with Sir John Burgh, the director general of the British Council.

Worst hit has been the faculty of sciences, in Beirut, which presently houses British marines and has been the target for some recent attacks. It has now been rebuilt four times and the total cost of replacements last year ran into millions of pounds. The whole area around the faculty was devastated in 1982, leaving the site devoid of trees or grass.

The education faculty, the oldest in the university, was also badly damaged and its irreplaceable library of 25,000 books completely burned. The faculty of letters, too, suffered extensive damage, but the entire university was repaired to the extent necessary for a reopening in three months.

This time Professor Tohmé concedes that the situation is potentially more dangerous, but he claims that the university could be open within a week of the fighting ending. In the past, the university's 30 "branches" have closed as soon as they have been forced to abandon teaching, partly because the nationwide institution operates common curricula with identical examinations, but this policy may have to be revised.

The university, which now has some 40,000 students in four widely-spread centres, expanded its number of teaching sites when the troubles re-

started in the 1970s so as to cut down the amount of travelling time required. Extensive shelters allow staff and students to be relatively safe in the university precincts: it is the journey to and from classes which spells the greatest danger.

There is little trouble between the students, despite the mixture of Moslems and Christians which exists on almost all the campuses. The academic staff, all of whom must possess a doctorate and teach in more than one language to qualify for a post, are similarly mixed.

In some ways it seems that the staff have been invigorated by the war. The number of publications has increased markedly, one cooperative venture with the US University on brain research, producing 11 papers in two years. But the violence has taken its toll. Three professors have been killed in the last year, one mistaken for a terrorist and shot by the army.

Professor Tohmé is still hopeful that the new academic year will get under way next month. If not, he says resignedly, the university will wait until ministers believe that it is safe for the students to travel. Academic programmes will run their full course, no matter how long it takes.

Environmentalists protest at altered gene experiments

from E. Patrick McQuaid

CAMBRIDGE, Mass. Exhibited as an ornamental curiosity at the 1876 Philadelphia Centennial, the Japanese vine kudzu caught on fast with American farmers. Through the 1930s the seemingly indestructible vine was used to control erosion in the deep south but has since crept unchecked through most of Dixie and is today swallowing cars, strangling power transmitters, and camouflaging entire buildings if unattended.

While admitting that this is their worst case, four environmental organizations are suing the federal government in an attempt to stop experiments at the University of California that would release a gene-engineered microbe into the environment to test its ability to clear frost damage against plants. The Berkeley test would be the first time the product of altered genes would be sent into the environment.

The new bacterium could prevent the formation of frost crystals on vegetation at temperatures as low as 23°F. With most frost damage taking place between 24°F and 30°F, the microbe has considerable commercial appeal.

The experiments by Berkeley's Mr Steven Lindow are partly funded by the advanced genetic sciences company and have been approved by the government's National Institutes of Health. The opposition - the Human Society of the United States, the Environmental Task Force Inc., Environmental Action Inc., and the Foundation on Economic Trends - all private groups - worry that if the bacterium were to find its way into the upper atmosphere it could disrupt the natural formation of ice crystals and impact on global climate.

Students demand Chinese assurances

Fourteen representatives of the Hong Kong University student union last week demanded that freedom of speech and democratic self-government should be assured under any agreement for the future government of Hong Kong. They were meeting with Xu Jiatun, director of the Hong Kong branch of the Chinese Xinhua news agency.

The students said that to some rulers "to stop the mouth of the public is more important than stopping a river." In the event of the return of Hong Kong to China, residents must still be allowed to "express their dissatisfaction over unreasonable things." This, they said, even included the right to strike.

Since students, they said, are not as a social stratum involved with any personal interests, the students would take the stand of the majority of residents, and therefore continue to express its opinion. At the same time, it would maintain its political independence.

The students demanded that the contents of the recent Chinese-British talks on the future of Hong Kong should be made known to the public as soon as possible. Xu Jiatun replied that, although the social life of Hong Kong would "basically remain unchanged", specific details have not been worked out.

Overseas news

Swedish loans inadequate

from Donald Fields

STOCKHOLM

Airing grievances that would provide ammunition for British opponents of the student loan system, Swedish undergraduates have been stepping up their campaign against the "inadequacy" of the financial assistance they receive from the state.

They contend that the squeeze, by hitting hardest at those from low-income families, is leading to a regression in the social structure of university enrolment that deviates from the Social Democratic government's egalitarian ideals.

The scale of the problem is evident from the impressive publicity accorded to a Stockholm university student union press conference designed to show how far student loans had lagged behind the overall inflation rate of the last few years.

If you confine the comparison to the main items of student expenditure - housing, food, books - then the gap is still wider," Eva Garland, the union's social secretary, said. "We reckon the average student's monthly budget now shows a SKr800 (£68) deficit. Lots of students are quitting because they can't finance themselves."

This problem is now deemed one of the key factors behind the relatively high incidence of drop-outs from Swedish universities. Recent studies indicate that 30 per cent of students experiencing problems with the principal blame on financial hardships. It is likely that a sizeable share of eligible youngsters who do not take up places at universities feel the expense is beyond them. "Students are coming increasingly from the upper class," Ms Garland said.

Swedish students are now convinced that their own material wellbeing has fallen beneath that of counterparts in neighbouring Norway. Thanks to a combination of last October's 16 per cent devaluation of the krona and a strong dollar and sterling, the cost of text books has risen by around 50 per cent in one year.

When Sweden launched its student loan system about 20 years ago, the government and *Riksdag* (parliament) pledged that the standard of living for students should be in line with that for low income groups. Using one of its favourite yardsticks - playground supervision (who are themselves under pressure thanks to economies that compel them to take charge of more children) - the Stockholm students now find themselves SKr 1,000 (£85) a month behind.

They want a fresh government undertaking that money for students will be permanently linked to the average at the bottom end of the incomes scale - but they fear the government, only 69 per cent of whose expenditure is currently covered by revenue, will remain passive. People aged over 25 make up about

Catholics dip into pockets

from Philip Wilan

ROME

Financial problems continue at Italy's Catholic University of the Sacred Heart, despite church collections throughout the country which raised 1.5 billion lire (£6m).

Although this university receives money from both national and local government and charges its students higher fees than the state universities, income families is leading to a regression in the social structure of university enrolment that deviates from the Social Democratic government's egalitarian ideals.

The university was founded in Milan in 1921. Party through the efficiency of private enterprise and partly through its more rigorous selection procedures it has avoided the overexpansion and declining standards that have characterized the state universities in recent years.

Though the headquarters of the university is still in Milan, there are now small faculties in Piacenza and Brescia as well as the prestigious medical faculty in Rome. The medical faculty opened in 1961 and is attached to the Gemelli Hospital, one of the largest and most modern in Rome. Doctors and students are expected to adhere to Catholic teachings.

The eyes of the world were focused on the hospital in May 1981 when Pope John Paul II was treated there for gunshot wounds after the attempt on his life. But according to medical dean Ermano Manti, several Communist Party deputies have shown their faith in the prowess of the Gemelli's doctors and chosen to be treated in the Catholic University hospital.

Manti attributes the Gemelli's high standards to its rigorous entrance requirements, based partly on continuous assessment at school, partly on a multiple choice written examination and partly on an oral exam. "We take a limited number of students, only 180 per year," he believes that in contrast, entry to state universities has been made far too easy. "The state university has been demolished in recent years," he says. "Many of the problems come from this medieval (school-leaving exam) being made too easy. The filter has been removed, but the universities were not equipped to cope with such a mass of people."

Manti cited the medical faculty of Sassari University in Sardinia where he was teaching until recently, as an example of the university boom. In 1973 less than 100 medical students were admitted while 10 years later 400 are given places, but with no corresponding increase in facilities. "Here the university was designed for 180 students a year and it takes no more." And he adds: "It's dangerous to produce badly trained doctors."

The undoubtedly high standards of the Catholic University are its surest defence against periodic threats to nationalize it.

THESE PEER REVIEW

The THESE has undertaken two surveys to discover how academics in eight disciplines regard the standing of their subjects. The results, giving both teaching and research ranking in architecture, chemistry, civil engineering, economics, French, history, physics and politics, were published in the THESE of 3.12.82 and 5.8.83. The two reports are now available in one six-page reprint (four pages of editorial matter) price £6p.

Inquiries should be addressed to Frances Giddard, THESE Peer Review, The Times Supplement, Priory House, St John's Lane, London EC1M 4BX.

The price includes postage and packing within the UK but not Red Star or hand delivery.

Black students clash with police

from Carolyn Dempster

JOHANNESBURG

Two of South Africa's largest black universities have been stricken by student unrest following demonstrations and marches to commemorate significant dates on the calendar of black politics.

At the University of the North in the black "homeland" of Lebowa, a meeting held on June 16 to commemorate the infamous 1976 Soweto riots resulted in a violent clash between students and the Lebowa police.

The conflict, which led to a number of students being taken to hospital, came in the middle of the university's scheduled examinations.

Since then the campus has been the scene of mass class and exam boycotts and last month the authorities closed the university for the third time in eight months because of the student unrest.

The deadlock between the authorities and the students continued well into August. The matter was only partially resolved when a court ruled that two students, dismissed after the June 16 unrest, be readmitted. However, the simmering discontent among the student body has not abated.

This week, at the black University of Fort Hare in the Ciskei "homeland", a protest march to commemorate the death in detention of black consciousness leader Steve Biko, led to violence and boycott of lectures by all students.



Black students born the South African flag.

The march, by about 250 students, took place on the night of September 11, when 45 of the 250 demonstrators were arrested by Ciskei police.

By Monday, the entire student body of 2,000 had come out in support and refused to attend classes. The boycott, now into its fourth day, is still continuing.

The university authorities have not yet stated what action they plan to take if the boycott continues, but a trial date for the 45 arrested has been set for September 27. Charges are of public violence and holding a gathering which constitutes a riotous assembly. In the melee a number of university hostel windows were broken and two female students were taken to hospital.

Graduates lack a driving force

E. Patrick McQuaid looks at the shortage of engineering teachers in American colleges and universities

En route to a conference on video games at Harvard University recently, there appeared one of those unique individuals who have ingrained themselves into the folklore of American academia.

A thin trail of blue smoke was spiralling from behind what seemed to be one of the flashier tabloids, but as the cab driver put it aside to flip on the meter it turned out to be a copy of *The Chronicle of Higher Education*. It was open to the positions available section, inviting a conversation that could not be passed up.

After earning his PhD in engineering, he worked as a computer circuit designer along Route 128, the beltway skirting Boston known as America's industrial highway. Tired of the frantic pace and the pressures of competition from inside and outside the company, he quit to find a teaching post. He'd been driving a taxi and scanning the back pages of *The Chronicle* for several months now.

The last decade saw a drop of more than 9 per cent in the number of scientists and engineers who earned doctorates, leaving American colleges and universities teachers in short supply to handle this decade's record enrolments in engineering subjects. There is little hope on the immediate horizon, according to a survey from the American Association of Engineering Societies and the American Society of Engineering Education.

Members of the Tau Beta Pi, an association of the country's highest-ranking engineering graduates, were polled to determine their interest in teaching. Only 2 per cent of the 694 respondents who earned undergraduate engineering degrees in 1977 said that they had earned advanced degrees and were now teaching. Of the 918 who graduated in 1982, only 7 per cent indicated that they would choose a career in teaching.

These were statistically sound samples, according to Mr John Geils, who reported the findings. Some 2,000 members of each class were asked to complete the questionnaire with 35 per cent responding from the class of 1977 and 46 per cent from the 1982 crop. The two particular classes were selected explained Mr Geils, to get a broad view of graduates and a seasoned set who had been out of university for five years.

Other data showed that 45 fields of engineering were represented in the class of 1982, and 40 in the class of 1977. Electrical engineering was the most popular field in each class with mechanical and civil engineering vying for second place.

Computer engineering and computer sciences had a very low showing in

each class. In 1977 only 1.4 per cent of the graduates were foreign nationals while by 1982 some 6.1 per cent of the graduates were not American citizens.

In ranking the factors that influenced their decision to accept employment rather than enter full-time graduate study, most students indicated that they were anxious to apply engineering education or couldn't turn down a high salary offer in industry. Other factors included the opportunity to earn a advanced degree part-time.

Members of the Tau Beta Pi were more likely than others to become candidates for graduate study and teaching posts, said Mr Geils. The lack of interest in engineering teaching by this group obviously raises the questions of how to make academic more attractive," he said.

A number of remedies had already been proposed, he continued. But solutions such as equalizing salaries, updating laboratory equipment, providing more postgraduate training, teaching stipends, developing an inner-city "perk" such as home-subsidized mortgage arrangements and taking into consideration broader cultural

questions, he said.

Mr Geils asks in his report whether present and foreseeable economics were going to determine that ever-changing equipment would be found more exclusively at the industrial rather than the campus site. He had the status and image of the professor been unalterably changed since the 1960s? Did the American elite and the rapidity of all change combine to profoundly disinterest prospective teachers and to define "achievement" in more immediate terms? Did instructional technology now being addressed and rapidly developed indicate that teaching was soon to take place in a structure very different from the traditional classroom? Should qualifications for teaching become more flexible?

The survey was carried out as part of the larger project on engineering college faculty shortage, directed by Mr Geils. Co-sponsored by the two engineering associations, it has also received funding from 11 multinational corporations - AT&T, T, Du Pont, Exxon, General Electric, General Motors, Hewlett-Packard, IBM, Rockwell International, Union Carbide and Weinschel Engineering.

The problem is defined as a critically

insufficient supply - less than 500 engineering PhDs for more than 1,000 faculty openings as the autumn of 1983. In addition there is a severe shortage of engineering graduates students in the pipeline for a PhD degree.

The full, final report of the group's two-year study, which will suggest ways to encourage engineers to seek teaching posts, is to be issued soon.

Some of the answers respondents gave in the survey included:

- a desire to work on practical, "real world" problems;
- finding graduate school too expensive, no decent fellowships available, and couldn't afford to go full-time;
- feeling "burned out" and needing a break from education;
- being tired of being poor and broke all the time;
- disliking the high pressure, low salary during first few years of teaching engineering;
- discovering that their own students wouldn't hire their own students as teachers and therefore being forced to quit;
- coming across foreign students working for "peanuts" while in graduate school;
- liking large complex projects, engineering, but finding that academic saw only narrow projects.

مركز التعليم



Bedford College's former site in Regent's Park, London.

There had to be permission to cross the runway but the departure lounges from Heathrow airport now stand at Egham, temporary academic accommodation for the merging Bedford and Royal Holloway colleges.

The use of airport cast-offs only implies urgency and imagination from the staff of the two London colleges. Although some of their other "temporary" pre-fabs have been designed to last some 60 years, the new institution, just outside Windsor, will be the only British university to benefit from a major building programme for many years to come.

Bedford College is selling up and moving from its beautiful Regent's Park site in London to the Royal Holloway College, some 20 miles away in 97 acres of wooded parkland at Egham, Surrey.

They have much in common; both are set in parkland and both are former women's colleges which allowed men in during the 1960s. They are about the same size and the new institution, still unnamed, will have about 3,000 students. Both have strong traditions - at Holloway a famous painting in the gallery used for examinations is covered with the Union Jack because of the legend that sitting near it brings failure.

But it is the beginning, the suggestion that the two colleges should unite was greeted with disbelief.

For Bedford, pressing financial problems made merger with another college the only apparent way out. It no action had been taken, there was an anticipated deficit for 1982/83 of £1.4m.

There was also a growing feeling that small colleges had had their day. Larger departments, particularly in the sciences, were better for survival.

So the college started looking round for a partner. Eventually, its first glance was towards Westfield College, based at Hampstead. The colleges were both about the same size, both former women's colleges, and had had close relations for many years; sharing equipment and facilities. Westfield had a healthy balance sheet.

The first discussion with Westfield took place with Professor John Blair, Bedford's former principal. He announced his intention to retire and a committee was appointed to find his successor.

Then there came pressure from London University. Both Lord Annan and Professor Randolph Quirk, the outgoing and incoming vice chancellors of London, wrote and then personally appeared at the appointments committee to say that Bedford should not appoint a principal, but let Bryan Thwaites, the Westfield head, run the two colleges.

But the pressure was resisted. Bedford thought that they would be in a dangerous position without a principal. They appointed Professor Dorothy Wedderburn.

The talks with Westfield continued but separate talks also began with King's College, London, and the prospect of this merger seemed much more exciting.

Bedford and King's signed a declaration of intent but after a short period it was clear that talks were going nowhere and they failed.

It is still unclear why they did. Many Bedford staff think the King's physics and chemistry staff actively opposed it. According to Dorothy Wedderburn: "I think King's academics were not convinced they needed to merge with anybody. It was also more difficult to communicate within the college. Also some of the scientists there pointed to what they thought were some of our weaknesses."

Room with a different view

Bedford and Royal Holloway colleges will be starting the new term together - Ngaio Crequer looks back on the merger

"On our side there were real problems about the King's site that were becoming apparent to us. Increasingly we realized that financially we were not going to produce the savings we thought we would produce."

For a while there was a shocked silence at Bedford. But then up came the name of Royal Holloway College, about the same size as Bedford, with a similar balance of subjects, and set in beautiful surroundings, but 20 miles away. Randolph Quirk, who seems to have spent much of his vice-chancellorship as an eager estate agent, strongly backed this new merger and was brought in to try to "sell" it to the staff.

Meanwhile at Holloway, though their decision to partner Bedford was less painfully arrived at, it still caused some heart searching, in their case their financial situation was healthy. In June 1981 it was becoming apparent that the smaller colleges would suffer more than larger ones in the cuts. As Dr Roy Miller, principal, puts it: "In a small college with small departments, there is a certain level beyond which you cannot go. So we decided we should invite other small London colleges to join us, primarily in a science consortium."

Randolph Quirk in the role of agent

Initially there was not a great deal of interest. The college also carried out an academic exercise to see which colleges might suit them. Bedford did not figure. At the top of the list was Westfield, then came Chelsea and Queen Elizabeth College.

The college also began serious discussions with Brunel University. This was an obvious choice at least because Holloway is so close to Brunel's Shoreham site. The institutions were a long way towards identifying areas of academic overlap and collaboration but there was one crucial stumbling block; Brunel is not part of the University of London.

Holloway particularly valued its membership of London and did not want to give it up. "We had reached the stage of trying to find ways of overcoming that when the rest of London began to catch up with the need for mergers to take place," said Dr Miller.

Bedford and King's talks foundered in January 1982. Bedford and Holloway started to talk.

Bedford's task was then much the greater. They had to make a great emotional sacrifice and move from their Regent's Park site, and also out of central London.

There was a bitter period with angry meetings. Former students lobbied hard to try to stop the move. Other mergers were put forward. Dorothy Wedderburn had to be tough and uncompromising.

The first governors meeting did not produce the necessary constitutional majority (though a simple majority) to the other side lobbied and they got the decision the second time. Nevertheless quite a number of people still do not want to go to Egham and they are taking early retirement.

Academically, the merger is sound sense, with a wider range of subjects possible, and existing ones bigger and stronger. The new college will be one of only five sites in London selected

for the concentration of science teaching and research, and this by itself will mean better students and staff attracted.

But some of the new college's distinctive subjects are being lost because of "asset-stripping" of Bedford by other colleges in the wake of horizontal academic plans. Dutch is going to King's. The new institution will have no law, economics or philosophy.

Some mathematics are going to UC, but others will take their place and there will be transfers of chemists and physicists to Egham. They just held on to Italian to join French and German in a modern languages school, and classics should remain strong.

Of crucial importance is geography. The majority view of the working party, accepted by London University senate after lengthy protest, is that Bedford/Holloway should be the site of a major geological development. A minority wanted it to go to the merging Chelsea/Manjion site. It is a major gain for Egham so long as King's will give it up.

The university has offered the new college Bedford Square in central London, essential at least for maintaining medical sociology, where access to hospitals is necessary.

Professor Inga-athna Ewbank is head of Bedford's English department. Her department moved to Holloway less than a month ago. "A great disappointment was losing Dutch. And the loss of philosophy was a blow to the whole faculty."

"But there are also opportunities. We will have drama, which we did not have before. We were very small before, almost non-visible. There is also music, a new centre for Victorian arts, and we will be able to start a new MA in linguistics and stylistics."

She feels the loss of central London, and thinks the students will need extra encouragement to go to visit galleries etc. They are trying to get British Rail to put on a later train so they can see pictures.

She noted a mixed reaction from students. "Those who had been at Bedford for a year were not very happy. They were established in London, had flats etc. We could not enforce residence at Holloway, we gave them a free choice. Out of 30 only four will live at Egham. The rest will commute."

"The college will be organizing a free bus service. We are giving them some seminars and tutorials in Regent's Park. It means members of staff putting themselves out, but willingly."

Professor John Peabody, Bedford's dean of science, thinks the merger has enormous possibilities. "London University is changing fantastically. We will have only five multi-faculty schools and this will be one of them."

"It is on a site which has a great deal of space around it, a lot usable so there is enormous potential. There is the possibility of a science park, and the fact that we will be a key centre for geology is very exciting."

The prospects of academic gain are echoed at Holloway. Kevin Livesey, college accountant, said: "One of the objects of the merger is that you can make something bigger and better out of this. This site was planned to be the Murray proposition of 20 years ago; pre-Robbins. So we have always been

thinking of this kind of expansion."

The merger has also affected admissions, with some students under the impression that Bedford is closing. Next week the joint colleges are holding a press conference to stress the new institution's impressive future.

Applications to Holloway have been slightly higher than in previous years but at Bedford they have dropped considerably. In some areas the drop has been between 10 and 12 per cent, and in a few subjects where the intake is anyway very small, the fall has been as much as 50 per cent.

Mr Les Turnbull, Bedford's secretary said: "It is understandable, we expected it. We know that in schools the advice is not to apply to London because it is all too confusing, you might start in one place and end up in another."

"But there is no problem filling our targets. We have not dropped our entry requirements at all. Our average A level scores are the highest we have ever had. A lot of people are saying how good it is to get a University of London degree in a campus university."

One of the very real problems for the merger's tenure, and it is interesting to note a slightly different attitude between the Bedford and Holloway administrators.

Briefly, Holloway has strong tenure (though this is questioned by Wedderburn, a lawyer - "It is possible to read it that they are under three months' notice") and Bedford weak.

The academic boards at both colleges voted in support of tenure but a joint working party straddling both institutions has included a redundancy clause in draft statutes. The thinking behind this was that the bill needed to give legal entity to the new college would need such a clause to get past the Privy Council. But the issue still has to be decided by the colleges - officially there is still no view.

Dorothy Wedderburn is adamant that the question of the new college's legal status will not hold them up. But she recognizes that there may be problems of morale for staff, if there are lectures at the new institution all on different contracts.

The prospects of academic gain

At Holloway the people and the pace is more relaxed. Dr Miller said: "There is no question of trying to force something through which is against the wishes of the majority of people in the colleges."

"There are a series of stumbling blocks round which you have to find your way. If the principle of tenure is accepted in the colleges then you have a problem with the Privy Council. It is not a question of whether the colleges do not agree with, then you are in earlier trouble."

"We cannot dissipate our energies in this area at the present time to the detriment of practicalities. We have a partnership agreement which is sufficient to come over which is a model. All that can be achieved without an Act."

But if the tenure battle is fought out at Holloway, the Association of University Teachers has two of its most ardent protagonists. At Bedford there is Dr William Stephenson, new president

of the national association, though it will soon be moving to University College.

At Holloway there is the formidable Dr Geoffrey Alderman, who has just taken over as chair of the London AUC. He is well respected in the college and speech he made to the London University senate on the academic plan was described by Randolph Quirk as "quite brilliant".

He says that Holloway staff have been influenced by two arguments: the Egham college is the only multi-faculty institution where tenure is broken they will not attract good staff of high calibre, and they will be a option in any further round of cuts.

"I made it clear to RHCAUT that we take a firm stand on tenure as might be delaying the merger. The University or court or the University Grants Committee could say that unless a Bill was passed there will be no money."

"The feeling overall was that certainly this was a risk but that the greater risk was that we would lose only a fraction of the fifth site. Tenure will be a very important issue," he said.

But meanwhile the removal of men and women carry on. Last year and the Bedford staff have been packing their things and moving to Egham. By next year only social policy and social science, psychology, geography and geology will still remain at Bedford, because as yet there are no buildings for them at Egham.

Last September Post Marxist, Mitchell and Co. prepared a appraisal for the merger. This appraisal requirement for capital investment in the public sector. Using this as a base the colleges estimated what their capital requirements would be, their running costs, and what savings they hoped to make.

A crucial element was the decision to reduce numbers of academic staff to reach a ratio 1:12 in arts and 1:10 in science. Final figures for academics may change, and the position is complicated because of accretions from other colleges. But in March the UGC was told that in 1981/82 the two colleges had a combined academic staff of 265. By 1984/85 that figure should be 205. Both colleges expect to get there without imposed redundancy.

The colleges estimate that they need some £16 million worth of new buildings, including a new library, new buildings for earth sciences, life sciences, mathematics, additional lecture theatre, new students union.

The principal source of this capital will be the sale of Bedford College property, but the UGC may need to provide the cash flow, or even guarantee grant if the Bedford sale is less than expected.

The colleges estimate that after allowing for planned maintenance there will be an annual saving of £790,000 on premises expenditure, a direct consequence of the merger. This is a saving of over 30 per cent.

In addition there will be a saving of £240,000 on academic salaries, assuming the new staff/student ratios. But they told the UGC, "savings of the order of magnitude may only be achievable by merging the two institutions. Without a merger they would damage irreparably the quality of teaching and research."

A further £320,000 worth of savings will be found in other shared facilities and a merged administration.

There may have been reluctance last year but the Royal Holloway and Bedford Colleges (and let us hope they think of a better title than that) is very much the "new" university of the 1980s.

Putting flesh on the bare bones of history

PROFILE

Peter Scott discusses the distinguished career of historian Professor Lawrence Stone

In an essay in *Daedalus* in 1971 Professor Lawrence Stone, the Wadham historian who migrated to Princeton 20 years ago, compared Sir Lewis Namier's preoccupation with chains of family and client interest in eighteenth century politics to similar preoccupations in novels like Marcel Proust's *Remembrance of Time Past* and Anthony Powell's *Music of Times*.

Such a comparison, he insisted, was not far-fetched. So it may be permissible to subject Stone's own intellectual biography to similar excavation - although any hint of nostalgia, even a nostalgic, envious that a comparison with Proust and Powell might suggest would be wide of the mark and of any association except an antagonistic one with the ghost of Namier wider still.

The intellectual excavation of Lawrence Stone reveals three separate things. First, it exposes the detailed formation of one of the most distinguished historians of the early modern period, the author of two books that are already established as enduring classics of scholarship: *The Crisis of the Aristocracy 1558-1641* and *The Family, Sex and Marriage in England 1550-1800*, and a forthcoming book *An Open Elite?* to be published in December which seems likely to follow the same path.

Second, it offers a vivid insight into the growth of the "new history", in particular it illuminates the collective development of that group of historians which coalesced around the journal *Past and Present* in the 1950s and included Keith Thomas, Edward Thompson, Eric Hobsbawm and Christopher Hill, a group that may have made the intellectual running in British historiography but has never quite managed to penetrate the citadels of political power within the discipline.

Third, Stone's shifting preoccupations illustrate the broader intellectual currents that have washed over history and many other disciplines since 1945: the stubborn persistence of Marxism, the spread of Weberian sociology, the rise and fall of Patersonian functionalism in social science, the explosive growth of anthropology's influence.

These intellectual currents in turn reflect the central political and cultural phenomena of the post-war world, the memory of pre-war depression that still cast a shadow over public life to the 1940s and 1950s, the liberation of the third world in the early 1960s, the rise of youth culture and student revolt in the late 1960s, and the inwardness, even selfishness, of the new conservatism of the late 1970s and 1980s.

Lawrence Stone was born in 1919 and educated at Charterhouse, where he was deeply influenced by his headmaster Sir Robert Birley. "Bored to death in the classical six," he was introduced to history, and personally taught by Birley.

After a brief cross-Channel interlude at the Sorbonne in the year of Munich he went to Christ Church. Although his undergraduate career was interrupted by the war he was to remain at Oxford for the next quarter of a century. It was in his early Oxford years that he discovered a second individual who was to have a decisive influence over his intellectual development, Professor R. H. Tawney.

From his fascination with Tawney grew his interest in economic history, a conventional enough interest for young British historians in the 1940s. "I

was never a Marxist but I suppose I was deeply influenced by the zeitgeist of Marxism which then still had a power that cannot be properly understood today," Stone recalls.

The influence of Marxism led not only to concentration on economic history, but within this field, to a fascination with the crisis of feudalism and the development of capitalism. Out of this preoccupation grew Stone's first book *An Elizabethan: Sir Horatio Palavicino*, a study of a sixteenth century banker.

Looking back across Stone's career some colleagues find it significant that he approached the potentially dry subject of the growth of capitalism through the vivid medium of an individual participant. They see it as an early sign that Stone was not to be a run-of-the-mill economic historian but instead would become both a distinguished exponent of the literary and individualistic tradition of British historical scholarship and range far and wide through the intellectual universe in his search for historical truth.

But his fascination with Tawney and the early influence of Marxism were more immediately crucial to Stone. These interests first located him as a historian - in the early modern period when modern capitalism was born, when he has remained although his period has been stretched more recently into the eighteenth century and even with his new book into the nineteenth. Then they got him started - by embroiling him near the start of his career in one of the most celebrated controversies in British history, the argument about the rise of the gentry in the sixteenth and early seventeenth centuries.

The heavyweights were Tawney himself, who argued that the gentry were rising, and Hugh Trevor-Roper (now Lord Dacre), who argued the opposite. When Tawney began to fail, his cause in a modified form was taken up by J. H. Hexter. But Stone himself played an important supporting role in the controversy, most conspicuously in a 1960 article in *Past and Present* "Trevor-Roper's Gentry Crisis".

The clean lines of the gentry controversy, so elegantly and vapidly expressed by the historical journals ("great agour and a good deal of malice," Stone recalls), have long since been blunted by the accumulated ambiguity of a hundred monographs. Yet the broader issues it raised have not lost their sharp relevance and its influence was crucial.

Can the early modern period continue to be seen as a time when Tawney's gentry-capitalists rose to power? Or are the social tensions of the period better seen in the context of an anachronistic defiance of localism against the encroachment of a centralizing state, as Trevor-Roper implied? Or, as Stone will argue in his forthcoming book, was this the time when the landed elite established itself on the plunder of monasteries and church land, and only dispossessed by cheap American grain and Lloyd George budgets between 1870 and 1910 - and whose values are still very much alive?

These intellectual currents in turn reflect the central political and cultural phenomena of the post-war world, the memory of pre-war depression that still cast a shadow over public life to the 1940s and 1950s, the liberation of the third world in the early 1960s, the rise of youth culture and student revolt in the late 1960s, and the inwardness, even selfishness, of the new conservatism of the late 1970s and 1980s.

Lawrence Stone was born in 1919 and educated at Charterhouse, where he was deeply influenced by his headmaster Sir Robert Birley. "Bored to death in the classical six," he was introduced to history, and personally taught by Birley.

After a brief cross-Channel interlude at the Sorbonne in the year of Munich he went to Christ Church. Although his undergraduate career was interrupted by the war he was to remain at Oxford for the next quarter of a century. It was in his early Oxford years that he discovered a second individual who was to have a decisive influence over his intellectual development, Professor R. H. Tawney.

From his fascination with Tawney grew his interest in economic history, a conventional enough interest for young British historians in the 1940s. "I



So in the 1970s he left the sociologists and cliometricians behind. Anthropology, particularly symbolic anthropology, seemed to him to provide more effective tools to get at the sources of behaviour. This new interest combined with a much older interest in the study of *mentalités* pioneered by French historians to open a new phase in Stone's career.

This produced his second famous book, *The Family, Sex, and Marriage*, which along with Keith Thomas' books on magic and animals is perhaps the most typical and celebrated product of the "new" history. It illuminated three new influences on Stone's development in the late 1970s: his personal determination to get beyond sociology and quantification to understand the context of individual behaviour; the new enthusiasm for family and women's history among younger historians; and, perhaps more speculatively, the inwardness and obsession with self that in recent years has succeeded the more public preoccupations of the extrovert sixties.

It would be grossly unfair to suggest that in the 1980s Stone has become his own revisionist, but not that he has mellowed to the extent that he now acknowledges some of the intellectual force behind the positions taken up his opponents. Looking back over the trajectory of the "new" history he accepts that too often the dimension of crude political and administrative power was neglected and that in the enthusiasm to construct models whether Marxist, Weberian, or Parsonian the individual and particular were forgotten.

Despite 20 years of happy exile in America, he remains very English

The second gap was perhaps filled during the 1970s first by the growing interest in anthropology and then by the growth of the micro-history of families and small groups. The first remains, perhaps because it still appears hostile territory occupied by the followers of Professor Geoffrey Elton and the heirs of Namier. The publication of Stone's controversial article "The Revival of Narrative" in *Past and Present* in 1979 may have signalled the intention of some "new" historians to invade this territory of their rivals. But it drew a polite dissent from Eric Hobsbawm in the next issue and the invasion has never taken place.

In any case Stone is not about to abandon intellectual positions so strongly established over 30 years. He is a veteran of historical controversy, a batter against the critics of Tawney in his early years and still one of the most powerful critics of the Eltonians whom he accuses of an amoral preoccupation with the State and the neo-Namierist whose view of history as a congeries of selfish interests he fears has begun to contaminate the seventeenth century and its revolutionary struggles of grand principle.

Lawrence Stone remains among the most distinguished of English historians. For despite his 20 years of happy exile in America, he remains very English. Although he has been and still is extraordinarily receptive to the most diverse intellectual influences on the study of history, he remains committed to the idea of history as a moral discipline.

At 63 he remains as productive and creative as ever. Princeton, Canberra, Oxford (welcomed every summer partly as an elder statesman, partly as prodigal son), in a restless progress he is still far from the ease of retirement from historical scholarship. *An Open Elite?* will question the easy assumption that in England men of business have always found it easy to penetrate the landed elite and suggest instead that the key to England's progress between seventeenth and nineteenth centuries (and decline in the twentieth) was the cultural homogeneity of bourgeois and gentry classes, a thesis that will certainly provoke new controversy.

Yet his justification of history remains very simple - and moral. It is that we should not only be able to see the houses, churches, fields of England; but understand how they came to be.

But Stone has always had doubts about such techniques, doubts that have grown with the years. He is concerned about the great expense of such historical research which swallows up scarce resources yet does not always produce commensurately interesting results. Above all he is worried that "you can't count motives, you can't count behaviour."

Amicable is not the first word which springs to mind to describe relations between social scientists and the police. But Strathclyde University's Centre for Police Studies is in the forefront of trying to break down the barriers of mutual distrust.

The centre, which was set up last year, is not sponsored by the police, nor by the Home Office, unlike the new centre at Brunel University. The centre's director, Professor Roy Wilkie of the department of administration, says: "We have a good relationship with the police, but we're very independent, and want to stay like that."

Strathclyde's links with the police began several years ago when members of the administration department became involved in designing and teaching management courses for police, both at force level and at national level at the Scottish Police College.

Staff realized there was a dearth of research into the management of police work, and the centre was formed to help fill a gap in university study.

One preliminary investigation sprang from the teaching itself: 400 sergeants on courses filled in questionnaires on their motivations. The Strathclyde team found that dissatisfaction arose largely because of force policy, poor relationships with supervisors, and lack of information. "All things that something can be done about," Roy Wilkie points out.

One sergeant read in the newspaper that his station was to be closed and that he was to be transferred. Another unfortunate officer was detailed to work on six months' night shift just after his wedding. But the study shows that what gave sergeants most satisfaction was the work itself.

There is still little hard information on the responsibilities and activities of sergeants, however, and researcher Stephen Bennett hopes to work in this area. Sergeants control day-to-day police work, and as Professor Wilkie points out, if they worked for a company such as IBM, their role as "first line supervisors" would be taken extremely seriously.

The centre's stated aims are "to foster co-operative relationships between the police service and the academic research community" and "to promote and disseminate a wider understanding of the problems and dilemmas of policing in an open democratic society".

Some social scientists will undoubtedly raise their eyebrows at this non-confrontational stance and may wonder whether there is a conflict of goals in a research centre also involved in training the police.

The PhD... will be a real and very great departure in English education, the greatest revolution in my opinion, of modern times" (Ernest Rutherford 1918).

When the dons at Oxford voted to accept the PhD - renamed the Doctor of Philosophy - in February 1917, the *New York Times* hailed the news under headlines that included "Oxford innovation to draw Americans", "Chairman for Rhodes Men" and "Action taken to divert stream this Country has sent Germany".

The PhD was introduced in Britain partly because of pressure from the United States and the Dominions, and partly to meet Britain's increasingly obvious industrial decline after 1850. But it was the First World War, and what, with hindsight, can only be described as fairly direct government intervention in university affairs through the Foreign Secretary, A. J. Balfour, that the whole episode incidentally gave birth to the Committee of Vice-Chancellors and Principals.

The problem was that increasing numbers of American students had been heading for Germany where they were able to obtain a PhD qualification. And to their BA, German higher education had led the world in the nineteenth century following the work of Wilhelm von Humboldt, creator of the University of Berlin in 1810, and pioneer of the ideas of state support for universities, and the school *Gymnasium* which prepared German students better than any other country for university education.

Britain, however, stuck to the Master's degree which since medieval times had signalled the satisfactory completion of a student's apprenticeship, gradually becoming a formality as the standard of the *Bachelor* which used to denote the first step (*gradus*) rose.

The early American colleges had

Breaking down the barriers

Olga Wojtas reports on a group of researchers who are finding ways to develop cooperative links with the police

in training the police. "We're not anti-policing," says David Bradley, lecturer in administration. "That's like saying you're against medicine or education. But we're not uncooperative. We're not tolerating corruption or arrogance, but we appreciate the siege mentality. The police are probably their own strongest critics, but like any organization, they like to keep it private."

The centre's links with the police are academically useful, he adds. Strathclyde researchers have found completely open access, while other academics have often had to carry out their work with no police collaboration.

The police themselves should benefit from these links, David Bradley suggests. "Although in the short term, with a bank robbery or a riot, you need direct professional intervention, in the long term the police are only effective to the extent that people themselves are self-policing."

The problems posed by an uncooperative public are matched by those posed by an uninformed public, he continues. If the public and politicians are to make demands on the police, and indeed to fund them, they must have as good an understanding as possible of the nature of policing.

Dr Karen Kermer, an anthropologist from the United States, who is conducting research through the centre on the work of the Community Involvement Branch, has benefited from Strathclyde's good relations with the police.

Coming from America, she confesses she anticipated some problems in police research, but reports: "I can't stress enough that the police have been incredibly cooperative and forthcoming."

The CIB's mandate is preventative, policing - trying to identify potential



"problem areas", which can mean, for example, discussing with an architect how a building can be made more secure. Dr Kermer is examining the CIB's relationship both within the police force and with voluntary associations, health and education departments, schools and the processing of juvenile cases.

The idea of community policing has achieved prominence following the Soarman report and its noted expert, Dr John Alderson, former chief constable of Devon and Cornwall, is visiting professor to the centre.

Police community involvement in Scotland predates the Bristol riots by a decade and the centre is keen to highlight that the Scottish experience may not be the same as that south of the border. Dr Kermer comments: "I feel there is a general respect for the police in Scotland, albeit occasionally reluctant, which doesn't seem to be so true in England or the States."

Mr Colin Mair, of the university's department of administration, is keen to research relations between the police and ethnic minorities in inner Glasgow. Glasgow has a higher concentration

of area of ethnic minorities in the inner city than anywhere else in Britain. Including London. There is very little documentation, however, on ethnic minorities in Scotland. Undoubtedly there have not been the disturbances in Glasgow which have occurred in the major English cities.

Colin Mair is concerned that unwarranted generalizations are made about "ethnic minorities" and "the police" as if each were homogeneous throughout Britain - he points out that groups in Glasgow are almost all Afro-Caribbean, with virtually no Asian and Oriental, unlike the situation in many cities south of the border.

Neil Walker, a researcher, is examining another area where Scotland has taken the lead, albeit a more controversial one: the community policing. The Criminal Justice (Scotland) Act passed three years ago, which altered the law on police investigations, is widely considered to have been effectively a pilot study for similar legislation proposed for England and Wales.

One highly contentious section allows police to detain people for six

hours without charge, previously a power could not be exercised unless there was enough evidence to charge them. Although police relied on the bluff of asking suspects to accompany them to the station, the people wanted to be apprehended were most likely to know this was purely voluntary refusal.

But in the first three months after the Act was passed, more than 100 people detained under the new law did not come to trial. "That means opportunity for people to vindicate their rights and no opportunity for the judiciary to monitor how police powers are carried out. The more likely they might be, the less likely they will be subject to monitoring," says Neil Walker.

There is a dichotomy between the kind of legislation and the debate a police accountability which the police feels has not been recognized in the political sphere. One presumes a change in the situation where there is going to be conflict between the police and public, the other presumes a sort of consensus.

Backed by a Social Science Research Council grant, Mr Walker is conducting a three-year study on the consequences of the law for police management. "The front line work takes place in a situation where control of the spot decisions is very tenuous, it must be retrospective. It's a fallacy to talk about control from the top, and look more legal provisions on the level just increases the lack of control."

There is a great deal of scepticism about whether the police can be managed at all, says David Bradley. "Question this. People are not people or trained, it's determined where they should go. In other words there's a lot of hidden control police but it has been a neglected issue."

Elaine Ormiston is researching the effect of technology on police management. This again is a sensitive issue with some people convinced that technology is vital for police work, while others see it as a threat to civil liberties. Ms Ormiston is currently examining the use of computers, which is standardized within the Scottish forces. Her initial research shows that training can often be inadequate because of lack of resources and that many officers are irritated by having to use computers.

Staff admit there could be difficulties. If research conclusions were potentially damaging to the police, but believe that guarantees of anonymity and a police right of reply are enough to maintain cooperation.

students to be channelled into other universities away from Germany. A British mission to the US under the four was told the importance of the student question. He consulted the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

Public concern vs. private benefit

David Heald analyses the crisis of the welfare state in the face of privatization of the public sector

The image of large public sectors is now sorely tarnished. Charges of bureaucracy, centralization, corporatism, inefficiency, paternalism and oppression are vigorously levelled against them. Although some of the sticks verge on polemical abuse, they have contributed towards the decisive shift in the climate of opinion towards the public sector. Significantly, the mud has stuck even when it only has been mud.

But large public sectors did not arise by accident. They reflected the triumph of the ideology of the Keynesian social democratic state, a commitment to full employment, a willingness to use industrial intervention, and support for the public services characteristic of a welfare state.

Its adherents were not a well-defined or necessarily coherent group, for bitter controversies raged between them, for example, over the extent of public ownership. Many, if not most, would have rejected the label "social democrat". What they shared, however, was a conviction that beneficial state action was possible in the economic and social sphere. This distanced them sharply from both contemporary and later advocates of the minimal state. It was a consensus which embraced Harold Macmillan just as surely as Aneurin Bevan.

Perhaps the most significant achievement of the Keynesian revolution in macroeconomic thought was that, for a time, it banished the notion that mass unemployment was just an inevitable feature, a mark on the landscape, of economic and social life. It was no longer seen as God-given: advanced policy could dramatically reduce its extent. The view that it was remediable, rather than part of the remorseless logic of the market economy, also encouraged a more humanitarian outlook towards the unemployed. The less unemployment was interpreted as a badge of individual failure to conform to the signals of the market place, more attention could be directed towards the needs of the unemployed as less emphasis was being placed upon the social discipline of unemployment.

This was one of the crucial links which made Keynesian macroeconomics a policy fit neatly alongside the Beveridge reforms. It was a programme with wide appeal. Keynesian ideas facilitated the survival of a predominantly privately owned market-oriented economy, albeit with a much enlarged non-market sector. Smoothing out the cycles of boom and depression was seen by many as a method of showing that Marxists were wrong when they argued that there were manifestations of the inherent self-destructiveness of capitalism.

The appeal of the Keynesian social democratic state to socialists rested not only in the prospect of banishing the spectre of mass unemployment but in the much more relaxed attitude this new stabilization role for the public sector generated towards its size. The tax and expenditure powers of the state would be used to mediate the economic and social inequality induced by the distribution of property and ability, the class system and the market economy. But Labour governments faced a paradox: the scope for social programmes and for improved living standards depended upon the economic performance of the very private capitalists to which the Labour movement had grown up in mutual antagonism.

Regardless of whether it could justifiably claim credit or not, the Keynesian social democratic state received powerful reinforcement from the post-1945 prosperity, with steady economic growth accompanied by full employment. But it was inevitable that those who had earlier claimed credit for perceived success would later be tarred with blame for perceived failure. Frustrated expectations, especially after the social lubricant of growth dried up, generated a bitter mood, with too much government, too powerful trade unions, too many scroungers and too many immigrants often being canvassed as explanations for economic decline.

But the fundamental change in intellectual opinion, especially the counter-revolution in the economics profession, is perhaps even more dramatic a development than the shifts in the political arena. It used to be claimed that the brightest minds were sympathetic to the programmes of the Keynesian social democratic state, echoing Schumpeter's view that intellectuals were naturally hostile to capitalism. The reverse could now be argued, at least about the economics profession: not so much in terms of numbers as of commitment, vigour and self-confidence. To a remarkable extent, monetarist and free-market economists have been setting the intellectual and political agenda.

Indeed, the heirs of Keynes and Tawney are strangely silent, their self-confidence apparently shattered. Inhibited by self-doubt, they freeze when faced by confident assertions that there are simple answers. To reply that economic and social changes have made problems much more complex and difficult to resolve might be true. But it sounds lame, hardly ground on which to stem either revolutions or crusades.

In the 1970s, Keynesian policies were seen to have "failed", leaving open terrain for monetarists to occupy. That failure was social and political, rather than economic and technical, originating in the labour market. The commitment to full employment and to a large public sector was made without sufficient attention being paid to the subsequent implications for the nature and role of the state.

Such unresolved dilemmas helped to explain the success of monetarists, such as Milton Friedman, in securing acceptance of their ideas and policies in governmental and financial circles. Strict control of the money supply was an easily understood proposal. The monetarist counter-revolution knocked away one of the intellectual pillars underpinning the large public sectors characteristic of the Keynesian social democratic state.

Whatever the logical links, the monetarist and free-market perspectives fit neatly together. When the invisible hand works smoothly, the monetarist diagnosis and prescription is reinforced, thereby generating powerful arguments against both discretionary command management and an "over-generous" tax/transfer system. Furthermore, the blame for high "voluntary" unemployment during any adjustment process is attributed not to failings of the market economy but to the operation of collective institutions, be they trade unions (for example resistance to real wage cuts) or the state (for example high unemployment benefits, and subsidized public sector housing inhibiting labour mobility).

The prescribed policy is therefore to free markets by curtailing the activities of the state and the operation of trade unions.

Traditionally the Conservative party has not taken ideology too seriously, a trait which enabled it to accept the verdict of 1945 and set out to prove that it could run the Keynesian social democratic state much better than Labour. But the radicalization of the Conservative party under Mrs Thatcher has seen it enthusiastically adopt monetarism and embrace the free market. As part of the rolling back of the state in favour of the market, many of the underlying premises of the Keynesian social democratic state have been challenged. That is why there is a crisis about the future of the welfare state.

Not only has the post-war commitment to full employment been abandoned. Just as in the 1930s, it is again becoming the prevailing orthodoxy that the state should not interfere with the development and a rather comfortable complacency has made it possible for awkward questions never to be asked. Such an absence of constructive criticism from within its own ranks has left it ill-prepared to respond to a hostile but sophisticated critique. Keynesian policy proposals were popularized using a one-sector model which entirely neglected the role of money. Sophisticates knew better but allowed this practice to continue. Furthermore, much of the analysis supporting the programmes of the welfare state was careless.

These deficiencies laid the foundations of policy seriously exposed to public sector: the respective roles of taxes and charges for public services is, of course, an age old issue but there is now vigorous advocacy of charges playing a much more significant role.

Privatization of the production of a service which continues to be produced by the public sector: the respective roles of taxes and charges for public services is, of course, an age old issue but there is now vigorous advocacy of charges playing a much more significant role.

Privatization of the production of a service which continues to be produced by the public sector: the respective roles of taxes and charges for public services is, of course, an age old issue but there is now vigorous advocacy of charges playing a much more significant role.



respectable for economists to discuss the therapeutic qualities of unemployment. The political victory of Mrs Thatcher, over her opponents within the Conservative party just as much as those outside, has provided a receptive audience for such views.

It is much easier to assume the problem away or to blame someone else than to solve it. Patrick Minford, the most prominent academic exponent of the view that unemployment is voluntary, not involuntary, with his writing containing frequent references to individuals choosing whether to work or to take leisure and benefits. Unemployment is said to be caused by governments and unions, with the prescription being privatization, lower benefits and state action against unions.

The clear-cut remedies of monetary discipline and less government have become instantly fashionable, encouraged by the political success of a Prime Minister who likes to think in terms of running the economy like a family budget, rallies the "right to be unequal" and warns to anything that can be called privatization. But to emphasize this fact is not to deny that there were aspects of the Keynesian social democratic orthodoxy which had made it vulnerable.

Becoming the prevailing orthodoxy has stifled its development and a rather comfortable complacency has made it possible for awkward questions never to be asked. Such an absence of constructive criticism from within its own ranks has left it ill-prepared to respond to a hostile but sophisticated critique. Keynesian policy proposals were popularized using a one-sector model which entirely neglected the role of money. Sophisticates knew better but allowed this practice to continue. Furthermore, much of the analysis supporting the programmes of the welfare state was careless.

These deficiencies laid the foundations of policy seriously exposed to public sector: the respective roles of taxes and charges for public services is, of course, an age old issue but there is now vigorous advocacy of charges playing a much more significant role.

Privatization of the production of a service which continues to be produced by the public sector: the respective roles of taxes and charges for public services is, of course, an age old issue but there is now vigorous advocacy of charges playing a much more significant role.

probing by those critics with a good grasp of economic analysis and little sympathy for programme objectives. The Keynesian social democratic state therefore suffered at the hands of critics who turned against it the weapons of commitment and analysis, backed up by wider political support, through which it had itself triumphed. But to concede the contemporary pre-eminence of free-market and monetarist economics is not to acknowledge their validity.

Coupled with the new willingness on the political right to embrace market notions, the budgetary stress on the Exchequer has become ever more acute. The potent combination of demography and recession has encouraged the view that the existing level of expenditure commitments will be unsustainable in the future. The in-built dynamic of public expenditure programmes and the growing difficulties of financing them have stimulated the search for alternative policies which would relieve this budgetary stress. Whereas this crisis would confront governments of any political persuasion, it is in seen as an opportunity by a government converted to the ideology of free-market capitalism and hostile to the economic and social role of the state.

"Privatization" is a new word, scarcely heard before 1979, which has quickly gained popular currency as an umbrella term for very many different policies, loosely linked by the way in which they are taken to mean a strengthening of the market at the expense of the state. Given the diverse policies so described the potential benefits and costs accruing from privatization must be specified and then evaluated carefully. It is a measure of the quality of the policy debate that so much of it is conducted in the terms of "private good, public bad: so privatize" or of its converse.

Although deep ideological significance is assigned to the precise line drawn between the public and private sectors, any careful analysis quickly cautions that attitudes which can be summed up as "privatization good" or "privatization bad" miss many of the most important and practical issues which have to be resolved. Within the broad framework provided by a political and economic judgment about the respective roles of the market and the state, detailed decisions have to be taken about the appropriate policy instruments in highly diverse sectors. Otherwise, policies of privatization or publicization are likely to be pursued

with great vigour but little insight. Privatization has in part been thrust to the front of the political agenda by past deficiencies in the way the public sector has been managed. The public sector, and hence the welfare state, is now suffering an unprecedented crisis of consent. Running the public sector badly is an excellent way of alienating support for its underlying objectives. But the threatening implications of having the public sector run by governments hostile to its existence are becoming increasingly apparent. The complex tasks of ensuring efficiency and accountability in the public sector are not assisted by rhetoric about "getting the state off the backs of the people" - even more so when such concerns are exceedingly selective.

For example, the disposal of public sector assets on almost any terms in order to reduce public expenditure and the PSBR is a strange contribution to economic efficiency. It is always possible to sell profitable and successful enterprises, such as British and British Gas, or shares in British Petroleum, in order to raise cash but this is partly done from the view that there should not be any successes in the public sector. Such policies are damaging, not least by leaving the public sector in an extremely unbalanced form, with "unsellable" and "unsuitable" activities prominent.

The most important test case for the future of the public sector will be the National Health Service. Here, it will be seen how far the Government's hostility to the nationalized sector spreads to the core welfare state. Developments are occurring on several fronts. The last Parliament saw dramatic increases in the level of prescription charges without much regard to whether these might cause other NHS resources to be wasted or to the extraordinary fact that three-quarters of prescriptions are now dispensed without the patient facing the per item charge. Contracting out of ancillary services is being pushed through despite considerable opposition from health authorities, with a stimulus to this policy being provided by the 1982 NHS industrial disputes. There will be more encouragement to private health insurance with the vagaries of the Government's accounting system (which counts public expenditure on the NHS but does not count tax expenditures on allowances against income tax), encouraging the convenient belief that this is a costless policy. What is fundamentally at stake are the implications for the future resourcing and quality of the NHS as an increasing number of the more efficient and articulate members of the community no longer depend on it.

It is yet another measure of the public sector's loss of consent that privatization as a slogan has acquired such currency and that resistance to it has been so sporadic and ineffective. In the Government's rhetoric, privatization is depicted as the route to increased efficiency and the way of making "the public sector for the people". Once the central message is accepted, privatization has few logical bounds: not only where performance is judged to be unsatisfactory but also to prevent now satisfactory performance deteriorating in future through the manifold alleged deficiencies of the public sector. In logic, the Falklands task force ought to have been contracted out - perhaps the Falklands themselves might be sold to the highest bidder!

When privatization is advocated in such a way, few of the real complexities concerning the concept and measurement of efficiency in public sector activities are even contemplated, let alone resolved. Nor is much attention paid to the concerns about equality and access which brought many activities into the public sector. Once market solutions secured a place on the political agenda it was perhaps not surprising that the qualifications which the more careful members of the economic profession attach to their advocacy of the market were completely forgotten. It is time to reject the view that anything the public can do better. But it is also time to worry more about the management of the public sector and to devote more attention to securing better directed public spending, for there will be severe limits on spending more.

The author teaches in Glasgow University's department of management studies. His *Public Expenditure: Its Defence and Reform* is published today by Martin Robinson.

Philosophy of a major innovation

Paul Flather traces the history of a qualification which is synonymous with advanced research

been no more than a shadow of the English institutions they had copied, able students eager for advancement had naturally turned to German institutions. From 1835 to 1881 the proportion of US foreign students in Germany rose from 1 to 22 per cent as they faced the option of a coveted PhD from Germany or just another BA or MA from Britain.

Simultaneously, after 1850, German research productivity soared above all other countries. The Americans made no bones about trying to copy the German higher education model, and by the 1870s and 1880s even in Britain there were petitions, inquiries, reports and Royal Commissions discussing the development of science and higher education. Thus in 1871 Prussia's resounding victory over the French prompted Thomas Arnold to exclaim that her success represented "the fruits of the effectiveness of the German university system".

The seeds were being sown for the PhD to arrive in Britain. But it was to take another 30 years before Lady Margaret Sumpter of Balliol College, Oxford, resolved the first PhD in 1919. The story of the debate that took place, unfettered by tradition, forced the pace, and how the First World War and the need to stem the flow of American graduates to Germany, concentrated minds, is told in a new monograph by Ronald Simpson, subtitled *A Century of struggle for postgraduate education*.

Now of course the PhD is an integral part of the British system, the magic

TABLE
Higher degrees awarded at British universities

Year	PhD	Higher degrees TOTAL
1860-61	18	18
1900-01	47	47
1910-11	271	271
1920-21	401	401
1930-31	827	827
1940-41	571	571
1950-51	791	791
1960-61	1,220	1,220
1970-71	2,352	2,352
1980-81	3,448	3,448

*Excludes MA in Oxford, Cambridge and Scottish Universities. Includes BSc and BEd at BPS at Oxford.

leaves almost synonymous with advanced research and specialization. Since the 1950s serious scientists have been expected to do a PhD, and since the 1960s the same has been true in the arts and social sciences. The irony, as students who flooded to do the PhD would be doing.

Mr Simpson, himself a refugee from Germany in 1934, chronicles in detail the debates before and during the First World War, before the PhD was accepted. Change was slow, because Britain was accustomed against the need for research by the process of industrial revolution and cheap raw materials provided by the Empire. Reforms among the new universities, exhibitions that revealed how far Britain lagged behind, and political ne-

cessity, are what changed attitudes. The need was forced by the creation of the Rhodes Scholarships to bring the Empire scholars to Oxford. But even after that much, Oxford did not offer that much. A heated correspondence in *The Times* discussed the problem with one Canadian academic pointing out Oxford had ceased to be the intellectual centre of the Empire. Meanwhile, London was discussing ways of setting up its own research institute, while Manchester, followed by Liverpool and Leeds, developed postgraduate study through fellowships.

Then in 1903 A. J. Balfour, then Prime Minister, very much a university man, urged the Allied University Conference to develop postgraduate study, and in 1912 the Universities Congress of the British Empire formulated a demand for a lower doctorate. Once war broke out, it became more apparent that Britain had begun to rely on other countries, particularly Germany, for many vital products and the pressure on universities grew.

The question of propaganda also emerged. Public statements that Germany was benefiting from the war were welcomed by the American Office to step into the debate. US inquiries about the provision of postgraduate education in Britain, increased pressure, and in 1916 a conference was held in Oxford to discuss the problem.

When the US entered the war that year the ideological question became more obvious with a need for US

students to be channelled into other universities away from Germany. A British mission to the US under the four was told the importance of the student question. He consulted the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and to the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opened proceedings recognizing how German universities were governmentally interfered.

Same ingredients different package?

Ian Glover and Ruth Schröck take a look at social science and the politics of language

Over the last year or two Sir Keith Joseph and other ministers have suggested that the word "science" in the title of the Social Science Research Council should be replaced by "studies". It would seem that these pressures are behind the recent decision of the SSRC to become the Economic and Social Research Council. This has prompted us to make two main observations.

Our first is that the whole English-language debate about the extent to which particular disciplines are "scientific" or otherwise, about whether they are "sciences" or "arts" and so on, looks frivolous and indeed quaint and semi-literate when the linguistic conventions and ways of classifying subjects for study of other Europeans, such as Germans, are examined.

The German way, accepted virtually everywhere in Europe apart from the British Isles, has long adopted a three-fold classification, as opposed to our two-fold one. Its first group of subjects comes under the heading of *Kunst*. They consist of the fine and performing arts, such as painting, drama, music and the various forms of creative writing. They are taught and studied in special conservatoires and their outputs are judged by aesthetic criteria.

The second group includes most of the subjects studied and taught in the British universities, and they are classified as part of *Wissenschaft* (literally "knowledge"). *Wissenschaft* includes all sciences - natural and social and most of our so-called "humanities" or "arts" subjects such as history, the classics, and literary and artistic criticism. On the Continent it belongs in the traditional universities, as at Heidelberg, the Sorbonne, Uppsala in Sweden. Students and teachers represent the world's thinkers and their outputs are judged by the criterion of truth. A simple way of illustrating the distinction between *Wissenschaft* and *Kunst* is to point out that whereas the former includes the production of histories of art, the latter produces works of art. Thus *Kunst* is for some of the world's makers and doers, rather than for those whose role is to study things.

The third and final group is described by the word *Technik*. In English, it has been portrayed as being most accurately understood as being "the art of technique with a capital T and a knight's hood". More simply, *Technik* refers to engineering and other "making and doing" skills apart from *Kunst* ones. In countries like West Germany, Sweden, the Netherlands and France it is taught and studied in prestigious technical universities (university-level engineering schools in France) separate from the traditional ones. Most of their teachers have been experienced and successful practitioners in industry, and graduates have received an education which is both broader and more practical than that received by the vast majority of British graduates of all types. Moreover and much more so than in the case in Britain, the outputs are aimed at particular sectors of manufacturing. The criteria by which these outputs are judged are ones of utility. (Does it work? Is it useful? Will it sell?)

It is worth emphasizing that *Technik*, which attracts students who are, at least as able as those who make other choices, does not easily translate into the English term "technology". It places more emphasis on useful personal skill, and lacks the English word's usually-attached connotations of social status, large scale, inhumanity, and direct inputs from natural science, its meaning is precise: unlike technology, it does not mean hardware, or ideas, or something that arts graduates love to hate, according to who is doing the talking.

Under the above scheme all those engaged in the systematic pursuit of verifiable knowledge of phenomena, in truth, of any kind are scientists. The French, the Russians, and most other Europeans use it, and even the Americans go a long way along its road when they categorize social scientists as part of "scientific and technological manpower". The scheme is far clearer

in its distinctions between the world's makers and doers and its thinkers than is the confused English-language distinction between art and science. It does not mistakenly and ideologically depict engineering as a mere sub-category of natural science in the face of an overwhelming body of evidence to the effect that engineering/Technik is much more art than science. Further its breadth implicitly and sensibly opposes the naive idea that there is such a thing as an exact science.

Political attempts to denigrate the social sciences generally neglect the fact that while they may not produce "hard" data as often as the natural sciences, they are usually "harder" in the sense of dealing with more complex phenomena, which are wilfully elusive and wilfully unique. There is of course bad and good natural science just as there is bad and good social science. Further, although attempts to produce firm predictions about human behaviour using social scientific or any other evidence are nonsensical in both theory and practice, we most certainly can talk of possibilities, limits and trends. Although tentative in principle, such talk clearly has to have practical relevance. Moreover those of us who have worked on social surveys know in practice almost frighteningly predictable the attitudes, let alone the backgrounds, of respondents can sometimes seem once a substantial part of the data has been processed.

Language is the most basic of all social institutions

Our second main observation is concerned with some of those who might be expected to defend social science against its outsider critics. Some sociologists and others have expressed a rather effete feeling that labels are unimportant, although in other settings some of the same people would probably support the contradictory view that language is the most basic of all social institutions. Labels do matter very much in this and many other cases, for at least three reasons. First, and most pragmatically for those directly involved, there is a slippery slope from social or "behavioural" science to social/behavioural "studies", to liberal or complementary or communications studies, to basic studies (how to use libraries and write reports), to the dole.

Second, social scientific data are usually both expensive to obtain and they are at least potentially useful, and to give away weakly to those who would effectively deny that they have much value is irresponsible. Economics, history, and sociology have produced the vast bulk of the potentially "relevant" explanations of Britain's decline and its related problems: the ideas and methods of social science are the only ones which demographic, marketing, and psephological and all other forms of research about human actions can draw on. The natural sciences are not equipped to produce such data, and attempts to apply naively idealized and other versions of their methods and forms of explanation to social phenomena normally produce descriptions which are one-sided, reductionist, or both.

Third, precise definitions and descriptions do matter, and not only on the "short-term" utilitarian kinds of ground noted as the first reason. They matter because truth matters, as educationists and politicians concerned with education should be particularly aware. Indeed, the fact that it is a concern with precision which emphasizes the right of social science to be classified with natural science, and science should be the main weapon for standing Sir Keith's political sophistries on their heads.

The authors are respectively lecturer in sociology and senior lecturer in nursing studies at Dundee College of Technology.

Just for the record . . .

John Field asks why Government departments have failed to heed the White Paper on public records

Some months ago, I tried to discover how government departments were responding to the recommendations in the Government's White Paper on modern public records. It seemed particularly important to know whether departments were drawing up lists of specialists whom they would consult with from time to time on their records policy; and what progress had been made in reviewing the procedure whereby the Lord Chancellor allows departments to withhold records relating to security matters for more than 30 years.

Not many departments felt able to reply to my questions, but those that did, including the Lord Chancellor's department, told me politely that the Select Committee on Education, Science and Arts was investigating these matters. In due course it would issue a report, and the public could expect to read it in due time.

There will now be no report on public records, at least from this particular committee. Christopher Price, who chaired it, and is well-known to *THEES* readers, lost his Lewisham West seat on June 9; but not before the committee was able to accumulate considerable evidence on the way the public records system operates. What has been published are the minutes of the evidence taken before the committee, and they offer a fascinating, if often unintended, set of insights into the workings of modern government departments.

Historians, though, will find much in the minutes to trouble them. The recommendations in the white paper seem to have had remarkably little impact upon departmental procedures; indeed, some major departments have little sympathy for a more open and imaginative approach to records-keeping; most remarkably of all, it would appear that the Public Records Office, for whatever reason, is unable to exercise the degree of leadership required if public records policy is to follow a reasonably consistent and effective pattern.

The white paper, regarded by many historians as excessively cautious on the issue of open government, rejected all but the most modest proposals of the Wilson Committee on public records. Wilson itself was not noted for radicalism: the underlying assumption was that the so-called Grigg system, initiated in 1954, was fine in principle and simply needed to be operated properly in those departments that had deviated from Grigg.

The Wilson recommendations tried primarily either to make the Grigg system work more effectively (for example, through the establishment of "sector panels" of historians to advise departments) or to bring it up to date (as with the suggestion that many documents, including those series of files known as "particular instance papers", should be sampled and stored mechanically).

Historians generally expressed disappointment that the Wilson proposals were jettisoned so cursorily, but scholars interested in long-term series of archival service data had special reason for annoyance. The white paper, it should be entirely remembered, was intended to be entirely removed from the protection of the Public Records Acts, as their bulk and confidentiality made storage and research problematic.

Among the protests received by the select committee was a long and detailed memorandum from Dr. Charles Webster, director of the Wellcome Unit for the history of medicine at Oxford, which argued that study of long sequences of clinical records was helping bring social science research into a closer relationship with "historical epidemiology" and social medicine.

The white paper was thus no modest satisfaction in itself. So why do many government departments seem to be ignoring it? The proposal to withhold lists of historians willing to be con-



The Public Records Office at Kew: not providing enough leadership

sulted on questions of selection, on an ad hoc basis, is said by the Lord Chancellor's department not to have been implemented at all.

As for the promise to reconsider the "blanket approvals" given by the Lord Chancellor to permit security-related records to be closed for over 30 years, it does not seem that there was much on offer in the first place. Early hopes that M15 files might at last start to enter the PRO have now faded. According to Sir Robert Armstrong, the present categories of "security and intelligence-related records over 30 years old" were allowed extended periods of closure in 1967; that approval will not be reviewed until 1992.

It is most unlikely that the Prime Minister will agree to create any new categories of security records before 1992. In at least one respect, the situation has worsened over recent years. Foreign Office papers currently included in the Lloyd George archives in the House of Lords were, said Sir Robert, "of a kind which a minister would not now be permitted to retain on leaving office".

The evidence before the select committee reminds us that government departments in Britain, in record-keeping as in other matters, are remarkably free from outside scrutiny. The considered verdict of Lord Denning, who as Master of the Rolls chaired the Advisory Council on Public Records for 20 years, was that "we were just almost a consumer council". The Advisory Council "would really not know what was being kept closed and for what there was an access of 100 years or 150".

Some things that departments do not want to show seem to have little in them to justify continued secrecy. The committee heard, for instance, about the journal of the first head of the Secret Intelligence Service, one Captain Sir Mansfield Cumming, which covered the years between 1909 and 1923; this remains closed to historians and others as some of the detail concerns operational matters, such as the disguises used by the good captain in the course of his business.

More often, though, carelessness or plain ignorance of specialists needs to be blamed. The Department of Health and Social Security, before it was chaired by Professor David Donipson, used to keep a mere 200 files every 10th year after they had ended their immediately useful life. But in a moral sense carelessness, ignorance or silliness simply do not compare in seriousness with those instances where government departments have deliberately destroyed or withheld files in an attempt to rewrite the past.

One example may well be the way the wartime records of the Special Operations Executive were "misfold" (Sir Duncan Wilson's charitable description) later on. These records cover details of joint operations with partisans in countries - like Yugoslavia and Bulgaria - whose relations with Britain later became sensitive on political, not security grounds. Researchers into Britain's possession of nuclear weapons have also complained persistently, with much justification, that

documents have been withheld on purely political grounds.

These abuses would be easier to stomach if there were any indications that government departments had turned their heads firmly against them in future. But once more the select committee's hearings do not inspire confidence. In particular, it is apparent that the career structure for departmental records officers is unduly restricting, and their standing in departments is low.

Lord Denning was characteristically to the point: it is "a dead-end job". The Civil and Public Servants' Association claimed that many departments in their records sections are "hives of the sick and incapable". Senior servants do not normally offer much client support and encouragement to the job to be taken seriously. Indeed, suspect that some MPs do not so greatly about modern public records.

The committee itself - or, to be accurate, its active members - seems to have sat in an atmosphere where a client combined with mandatory respect. The most glittering witness called before the committee - the Right Honourable Francis Pym - was a jettisoned of refusal, preferring to play the part of Gandhi and offer passive resistance to the committee's investigation.

What may cause even greater concern to historians is the apparent failure of the PRO to fight its corner. It does not exercise the firm leadership guidance required of it under the Act, which supposedly ensures that it shall "co-ordinate the public record policies of different departments".

Lord Trend, in his evidence, ascribed its failures to a "conscious" indifference on the part of the PRO, and preoccupation with the part of the department with other and more urgent, important matters. The inferiority complex is not surprising given the way it has been singled out for disproportionately damaging cuts from 456 in March 1980, its workforce had fallen to 406 by April 1982, at a time of steady expansion in public record services.

Yet its failings are not simply due to material weakness. Professor Margaret Gowing, herself a one-time part-time records officer, told the select committee that the PRO had paid little attention to the problems arising out of departmental reorganisations, and completely failed to use its statutory powers to "ensure reform" of departments with bad records systems.

This suggests a deeper lack of confidence. And what can one make of Professor Morlin's suggestion, repeated in destruction of records, that "there is something to be said for serendipity (the element of chance) in these matters"?

Education, Science and Arts Committee: Public Records: Minutes of Evidence (House of Commons paper no. 1150) £9.15p

The author is lecturer in economic history at Northern College, Barnsley

General description

Part-timers are an instantly recognizable breed, resembling snails, in that they carry their security with them. Part-timers can be seen, staggering on and off public transport, under the weight of their teaching materials, fearful lest, in the absence of suitable storage space, keys, and faith in their colleagues, a vital element of their teaching programme will go missing, and render them ineffectual.

A part-timer is a person, who, facing the unpaid desert waste of a long summer holiday, after suffering all the academic year long, jibes about grossly inflated hourly salaries, tries to spread nine months salary over 12. On finding that it won't be spread so thinly, trots meekly to the dole office and is told to go away as he/she is a "seasonal worker".

Part-timers have the thrill of the unexpected in their lives. Notice to the employer can be given very quickly, and no one really takes the terms contract very seriously. Of course, the situation also works in reverse.

A part-timer is nifty with a pocket calculator and a dab hand at form filling. Who wouldn't be, given the tedium and complexity of salary claims?

A part-timer is a shrewd budgeter and an accomplished groveller. When the four-weekly salary claim becomes five and a half weeks counting submission, six and a half weeks counting getting lost in the labyrinth of Council Hall and re-starting the whole affair, and finally disappearing into the bowels of the computer, never to be seen again, then the family has to be weaned on to vegetarian nut roast without the nuts, the bank manager placated, the gas, electricity and phone moguls courted with assurances of honest intent.

Experienced part-timers know that they can get part-time work by applying for full-time jobs. They aren't daft enough to think they will get the full-time job, but that goes to the point. But if the part-timer gives a good interview, there may be a consolation prize in the offer of a few hours' teaching.

Transatlantic vacations are no longer miracles, but spare a thought for our forebears for whom they were a one-way ticket.

On my first cultural pilgrimage to the United States some years previously, I had visited diverse places: Harlem, Dreiser's Chicago, Sinclair Lewis's Main Streets of the Mid-West and, above all, Jack London's favourite saloon on the waterfront at Oakland. Perhaps I was deluding myself and didn't see it at all; it was certainly not what Jack London saw.

I also saw Poe's cottage at Richmond, Virginia, where he lived with his child-bride in 1837 - "Two dollars the poems and don't touch the bed-linen" as the lady curator cried. Nothing much to do with the tragic genius of Edgar Allan Poe, who died in an alcoholic stupor at Baltimore, far to the north, in 1849. But it created a vision of his stark existence in this tobacco-fragrant Southern city when in 1835, after leaving West Point, he edited *The Southern Literary Messenger*.

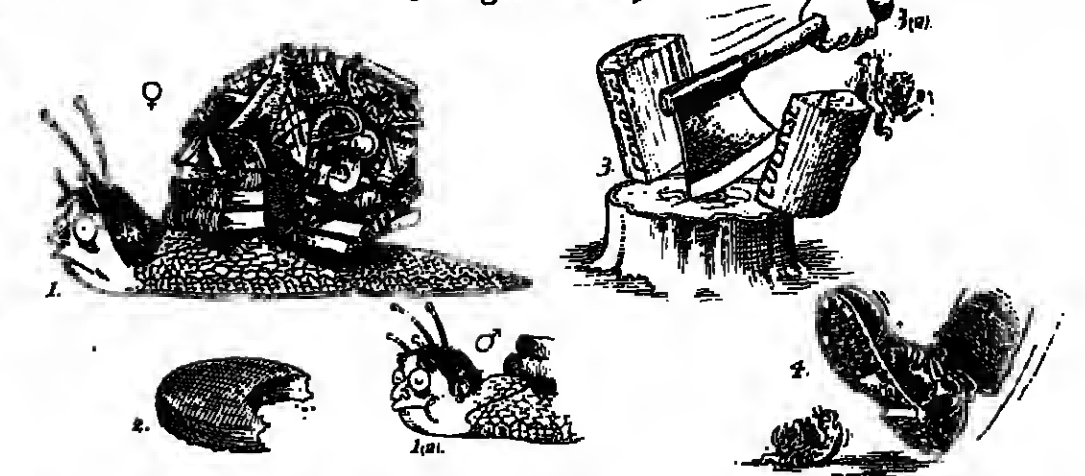
On my second pilgrimage, on the advice of a friend, I resolved to go in search of Scott and Zelda Fitzgerald, William Faulkner, O. Henry, and the civil war - a powerful theme in American literature - in which many north and south Irishmen died on both the Federal and Confederate sides.

Everything in America is geared to the traveller's convenience. At the arrival gate of an airport, along with carterels and other services, there is a battery of freephones for the weary traveller to call motels at any hour of day or night. I liked the excitement of American motels, whether airport or downtown - Holiday Inn, Ramada, Marriott Motor Inn, Hyatt Regency - each one tailored to the size and cut of your credit card, with much socializing and politeness, and commercial and commercial politeness, so you are always in danger of being roped in for the time of your life.

Another feature was the number of religious crusades and revivalist missions taking place, the gospel singers very young and vibrant with cleanliness inside and out. And then there was the ageing GI bride, 40 years on and longing to be Donaghadee.

Your friendly bell-captain is the guy who arranges all the bus-trips and

Fig 27 Common part timer (*Systemsgoril inferus*)



1 and 1(a): Adult specimens. Note characteristic prostrate attitude. 2: Feeds mainly on the useless culet. NATURAL ENEMIES: It is in constant danger from the mad assemblage of education (Ja). It also lives in fear of almost everyone else in education (Z). CALLS: "Gizajob" and "Yul'idoinit".

How to spot a hardy species

Ruth Ward compiles some field notes on the natural habitat and typical characteristics of the part-timer

Good points

Part-timers are voracious! There is no end to the gaps they can plug while nervous breakdowns and babies are had, handwagons are started, and experiments tried.

Part-timers are reliable! Not for them the luxury of soaring temperatures in bed, cars that won't start and buses that break down. Pay depends on presence; so part-timers can always be relied upon to hold the fort, scattering germs like confetti, while waiting for their full-time counterparts to emerge from the breadrinders in their extended lunch hour, collect their children from

school and service their cars.

A part-timer knows his/her place. One are the days when their first question was: "When do I put a pay claim in?" followed by: "How long will it take to come through?"

Mindful of the fact that their full-time bosses will turn contemptuous eyes on them when they hesitantly raise the question of pay after four weeks' unflagging service, knowing that they are expected to work for free and that their money comes out of the personal pocket of their superior, part-timers will work twice as hard as everyone else in an effort to justify

their existence and that feeling of being there on sufferance. The part-timer's feeling of stoicism is won through his/her ability to shrug off the hurtfulness of that most frequently uttered professional phrase: "It's that bloody part-timer's fault."

A part-timer is someone to whom you can safely give a half-baked idea, a shed and a few chairs, and tell them to: "Equip tomorrow's society."

The part-timer attacks his/her work with the cheerfulness and confidence of one who knows he/she will just get going, begin to generate interest in his/her students and then hear that the

idea wasn't a very good one anyway and in any case someone got their sums wrong.

Part-timers are sunny optimists - forever fantasizing about their services being rewarded by the offer of a full-time post. They are competing against education cuts, the axe-men (local edition of the Manpower Services Commission and their strange game of "Now you have a course/Now you don't"), and the arbitrariness of their immediate full-time boss. But hope springs eternal.

Bad points

Only two have thus far been noted: 1. A tendency to lapse into nihilism. This can be due to exhaustion from their efforts in manning educational outposts like prisons and Bostals and trying to make the word "education" something other than a farcical ritual. It is especially noticeable at yearly conferences during the noble speechifying and exhortations to greater efforts. Careful observation will reveal the part-timer's eyes glazing over, and the silent workings of his/her mouth decoupled as the rather negative, truculent comment: "Well you try doing it then!"

2. A part-timer may develop schizoid tendencies. This is an occupational hazard, caused by that ability to earn cash through diversification. Taken to extremes - a morning here with the YOP and YTS trainees, an afternoon there with the Asians, and dreams haunted by the recurring nightmare that the prepared session is given to the sophisticated in the maximum security prison.

So, finally, what is a part-timer? Is it a middle-class mum keeping her hand in, a Thatcher reject at 22, a skiving supplementer of dole, a struggling poet, a walking disaster area, educationally speaking? The answer is all of these things and probably worse. More accurately, however, is that in these days of accountability, the recession has swelled the ranks of talented and hard-working part-timers. The "second-class citizen" tag should no longer apply.

Nice work - shame about the status. The author is a part-timer.

Leslie Gillespie makes a literary progress through the decaying towns and sleepy plantations of the Deep South

Literary trails down south

Here a Turkish belly-dancer with an accent of the Bronx invited privileged visitors to join her act and I obliged to the raucous approval of the US Navy. She offered me a permanency which alas I couldn't accept due to prior commitments.

Down the coast and into Georgia is Savannah, picture of a port in decay after the fall of King Cotton. Settling itself up as a counter-attraction to Charleston and rearing the slur of being a poor relation, Savannah was founded by an English pioneer town-planner named Oglethorpe. The restoration of its decayed Georgian buildings is in the hands of a local heritage society inspired by genteel, though vigorous, ladies, and its old waterfront has been turned into lively boutiques and restaurants.

It was here that John and Charles Wesley preached their faith before falling foul of the colonists through practising their Christian dovetails incessantly and rigidly, with the result that they performed returned prematurely to England. Many of the first colonists were gentlemen rakes, debtors and bankrupts, bedies out all descriptions, settled there on the Georgia frontier as a protective outpost for Charleston against the raids of the Spaniards and the French.

So the Deep South became deeper. I flew to Montgomery, Alabama, in the company of a judge who was going to arbitrate in a labour dispute between a textile company and its operatives. He had been badly wounded in the Philippines in World War II but retained a joie de vivre which his legal responsibilities hadn't dimmed.

Montgomery was only an hour away from Atlanta by air and another game of mine began - looking up the local directory for namesakes and long-lost cousins or distant collateral who had

vanished from sight, possibly in the civil war . . . Stewart, Walker, Orr, Trimble, Gillespie, Alcorn, Bothwell, Keyes, etc. There were hundreds, but the German connection was strong too, presumably from Hanoverian times.

Montgomery was the Confederacy's capital during the civil war and is still the historic city of the South. The Confederate Museum and home of the Confederate president, Jefferson Davis, contains all the sad bric-a-brac of letters, uniforms, weapons from the war. Here too is the state legislature and the home of the former state governor, George Wallace, who survived several assassination attempts but eventually died of his cumulative injuries. Political assassinations are a feature of the South . . . Governor Huey Long of Louisiana, John F. Kennedy, and there were others. Gun-laws you call it.

In fact I sensed an overpowering atmosphere of mourning around Montgomery, not least in the house with a red door where Scott Fitzgerald first called on Zelda Sayre, his wife-to-be and collaborator in art when the Jazz Age began. Incidentally, I think that Zelda's novel *Save Me the Waltz*, in its crazy way, has as much gonitas as Scott's *The Great Gatsby*. But she tried to destroy him; in the end they destroyed each other.

There's no doubt that Scott had a big hand in Zelda's *Save Me the Waltz* and especially so because it was their life and love together. Too poignant for words - for Zelda in fact died in the fire at the mental hospital, for Scott as big a slide into drink as Edgar Allan Poe. One thing I didn't like was the fact that one of the museum staff, a retired businessman, talked a lot about the Fitzgeralds but had obviously never turned a page of their works.

To get to the Sayre home - and I was told the Fitzgerald's daughter Scotty was still living there - I hired a Redlands (or was it Redlight?) taxi, a Pontiac falling apart, and there was in the old beat-up driver what it means to be a poor white . . . "Aw shucks mister, aw don't wanna take no money from you folks you been so mighty friendly."

After a while, I was offering him a job as a taxi-driver in London, but I'm

afraid he wouldn't be sharp enough. Out of respect I didn't dare to knock on that red door of the Fitzgeralds. After all, for Scotty it would have been another literary intrusion.

I could have gone to the Alabama coast to swim again or could have surveyed the scenes of Faulkner's novels in Mississippi, but I cheated by going straight to New Orleans which has massive industries and extensive docks, and, of course, the French Quarter, where all that jazz. In the airport limousine (on elongated taxi) going into town there was a young upper-class guitarist who said he was a personal friend of Princess Margaret and Roddy Llewellyn. There seemed no point in pursuing that matter further.

In *Streeter Named Desire*, Tennessee Williams creates a haunting picture of his own life - a tender elegy - with the French Quarter as a symbolic background. But nowadays, overwhelmed with tourism, it is vastly changed from the time he, or O. Henry, worked there.

Bourbon Street, a garish scene akin to Montmartre rather than Soho, has Dixieland jazz ringing out all hours from Preservation Hall, where elderly negroes toot-toot-toot on the trumpet all night in competition with fried so-fond, exorbitant drinking-dens mainly for sailors and the aleazest stripteases you'll see anywhere. I stayed in a duplex at the Ramada Inn on Bourbon and found it ideal for a silver-golden weekend.

I took a moonlight trip along the Mississippi on the Natchez Queen, a floating gambling-hell from old times. When I asked the skipper some foolish question about navigating the channels, he gave me short and salty shrugs. "Now see here fella, ar you lookin' for trouble?"

Thence to Nashville, home of Country and Western, and Memphis, another great cotton river-port, birthplace of Elvis Presley, and here I heard Hoagy Carmichael's *Memphis in June* exquisitely reworked. Finally there was Chiotanooga (inspiration of the *Chattanooga Choo-Choo*) and after that I came home with considerable regrets and put away my tourist-coloured spectacles for another year.

The author is lecturer in communication studies at City of London Polytechnic.

BOOKS

The fruits of evolution

by Richard W. Burkhardt, Jr

The Growth of Biological Thought: diversity, evolution, and inheritance by Ernst Mayr
Harvard University Press, \$30.00
ISBN 0 674 36445 7

In 1942 Julian Huxley proclaimed through the title and contents of his book, *Evolution: the modern synthesis*, that biologists were reaching a new consensus in their understanding of the evolutionary process. The emerging consensus, briefly stated, involved the fruitful union of the findings of genetics on the one hand and naturalists on the other, two groups which previously had been at odds with one another in their views of how evolution works.

The general conclusion reached in this "modern synthesis" was that the various phenomena of evolution can be explained as the result of a two-stage process: the production of genetic diversity through mutation and recombination in natural populations; and the selection of these small genetic differences to natural selection. Huxley's *Evolution* (1942), George Gaylord Simpson's *Tempo and Mode in Evolution* (1944), and Bernhard Rensch's *Neuere Probleme der Abstammungslehre* (1947), Ernst Mayr's in his latest book calls the synthesis "the most decisive event in the history of evolutionary biology since the publication of *The Origin of Species* in 1859."

Professor Mayr's contributions to the evolutionary synthesis four decades ago, his dominant role since then in the development and consolidation of the synthesis, and his long-term interest in the history of his field make him eminently qualified for the task he has set himself in *The Growth of Biological Thought*, which effect analyses the development of those areas of biology of most concern to the evolutionist: the diversity of life, organic mutability, and heredity. He comes to his task equipped with a vast knowledge of biological phenomena, an impressive array of insights, and a collection of strong opinions he is fully entitled to voice.

The book is a masterpiece. It is grand in scope and profound in interpretation. It is also deliberately provocative. Mayr believes that modern students of biology are doubly disadvantaged by a lack of appreciation of the history of their field and by the common assumption that the way to make biology "more scientific" is to make it more like physics. His book stands as a powerful corrective to both these fallacies. He argues not only that the issues of modern biology can only be understood in the light of preceding debates but also that there are biological problems which are neither "reducible" to physics nor particularly amenable to the quantitative and experimental methods that have been the hallmarks of physics and physiology.

The book is written not so much for the professional historian of biology as for the intelligent layperson, the student of the history of ideas, the practicing biologist, and those "neobiologists" from the physical sciences and mathematics whose technical sophistication is rarely matched by an equivalent conceptual sophistication. Training in the physical sciences, mathematics, or even physiology does not prepare one, Mayr argues, to handle the kinds of questions the evolutionary biologist confronts.

To understand the growth of biological thought, Mayr says, one must have a grasp of the conceptual structure of biology. One must have a feeling, in other words, for the philosophy of biology. Unfortunately, philosophers of science have for the most part assumed that the philosophy of physics should be the model for philosophy of science generally. A proper philosophy of biology, Mayr suggests, would recognize the inadequacy of physics and chemistry to provide a full understanding of living organisms; the "historical" nature of

organisms (and their possession of historically acquired genetic programmes) and the uniqueness of individuals and the genetic variance of populations of individuals.

It would also recognize the difference between the proximate ("how") questions of the functional biologist and the ultimate ("why") questions of the evolutionary biologist and the importance of the establishment of concepts, rather than merely the acquisition of facts, for the history of biology. Other important considerations would be the emergence of novel characteristics in living systems as these systems reach higher levels of organic complexity and the truth that "observation and comparison are methods in biological research that are fully as scientific and heuristic as the experiment". Finally a proper philosophy of biology would acknowledge the possibility of an autonomous biology which is neither vitalistic nor in any way in conflict with the laws of physics and chemistry, but which achieves "a physical reductionism that is unable to do justice to specific biological phenomena and systems".

Mayr would like to be able to accomplish two things at once: recreate the ideas of scientists of the past while conducting the reader to the biological truths of the present. These goals, however, are extremely difficult, if not impossible, to realize at the same time. Mayr's professional involvement in the major issues of modern evolutionary biology, the vast dimensions of his topic (which force him to "streamline" his account of historical developments), and his view, derived from Arthur Lovejoy, that biological problems have "like histories" of their own, all work to a greater or lesser extent against the historical ideal of placing the scientific ideas of the past in their proper historical context. None the less, if Mayr ends up displaying less historical sympathy than he claims for the discarded ideas and conceptual frameworks of biology's past, his book is still a real tour de force, immensely instructive and stimulating at the same time.

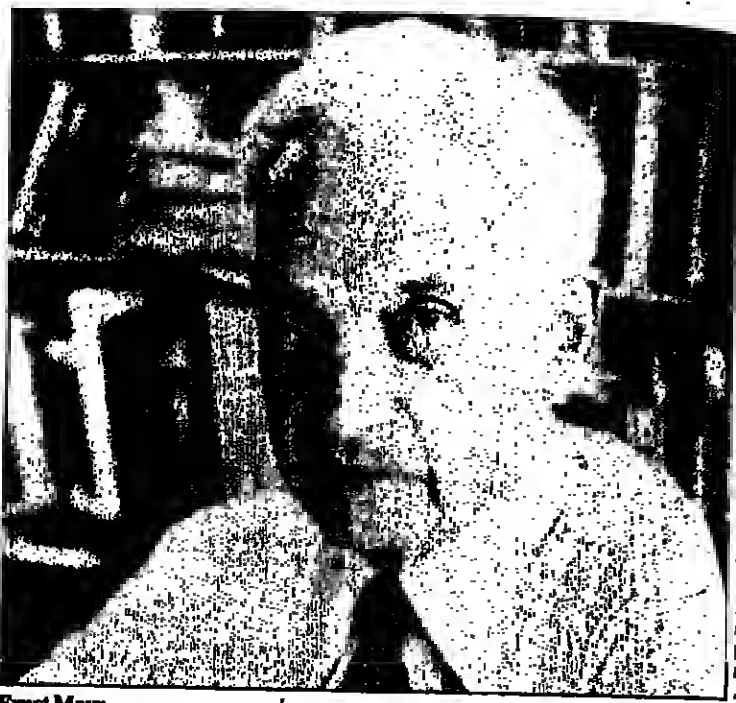
For each of the three areas of biology he considers, Mayr begins with the ideas of the ancient and then escorts the reader up to the present, paying particular attention, appropriately enough, to developments in the nineteenth and twentieth centuries. The section on the diversity of life starts with the classificatory work of Aristotle and concludes with an examination of the three main modern schools of systematics: the numerical pheneticists, the cladists, and the evolutionary taxonomists. The section on the Greeks through Lamarck and Darwin, dwelling in some depth on the structure of Darwin's theory and the evidence at Darwin's disposal. This section then continues, with an especially interesting chapter on post-

Darwinian developments and the evolutionary synthesis, concluding with a survey of "post-synthesis" issues. The final section, on variation and inheritance, surveys early theories and breeding experiments, the development of cytology, the work of Gregor Mendel, the flowering of Mendelian genetics in the early years of the twentieth century, the theory of the gene, and the study of the molecular basis of inheritance.

As in previous writings, Mayr hammers home the significance of population thinking for the understanding of the evolutionary process (scientists who persist in thinking of species as ideal types are incapable of appreciating how natural selection works). More explicitly than in his earlier writings, Mayr also insists upon the paramount role that naturalists have played in the history of biology. As a naturalist and systematist himself, he is keen to disabuse the reader of the popular notion that systematics or taxonomy is nothing more than a kind of "glorified stamp-collecting". The theory of evolution - the greatest unifying theory in biology - was, he says, "largely a contribution made by systematists" and most of the individuals of the 1930s and 1940s "who most successfully integrated genetics with the major problems of evolution" had backgrounds as taxonomists. What is more, he insists, "It was the study of diversity more than anything else which undermined essentialism, the most insidious of all philosophies. By emphasizing that each individual is uniquely different from every other one, the students of diversity focused attention on the role of the individual; this in turn led to population thinking."

In evaluating the scientific response to Darwin, Mayr indicates that "the only solid support Darwin received for his theory was from the naturalists (Alfred Russel Wallace, Henry Walter Bates, Fritz Müller, and others). As for August Weismann, 'perhaps the first evolutionist' to ascribe evolutionary changes exclusively to natural selection", Mayr claims; "It is clear from Weismann's biography and from his research on butterflies that he had been an ardent naturalist all his life."

While Mayr extols the insights of naturalists with respect to the problems of evolutionary biology, he is critical of the thinking of physicists, mathematicians, and engineers. Fleeming Jenkin, typically regarded as one of the most important of Darwin's reviewers, exhibited "all the usual prejudices and misunderstandings of the physical scientists." As for the notion that mathematics is the "queen of the sciences", this, Mayr says, is a myth. The ill-advised application of mathematics to biology led to typological thinking in the case of the geneticist Johannsen; a prime example of how "the adoption of fashionable con-



Ernst Mayr

cepts or techniques failed to produce meaningful results."

If other historians of twentieth-century biology have been inclined to emphasize the role that mathematical population genetics played in reconciling Mendelism with Darwinism, Mayr is quick to point out that for the sake of mathematical tractability the population geneticists over-simplified the factors in their formulas and contributed to the misconception that "genes, rather than individuals, are the target of natural selection." With respect to the limitations of experimentalism, Mayr observes that it was Hugo de Vries' "obsession with the exclusive value of experiment which misled de Vries into believing that mutations explained the origin of species."

Brilliant as were Konrad Lorenz's efforts in developing ethology as a biological field, for example, they did not entail, as Mayr suggests they did, the introduction of population thinking into the biological study of behaviour. As for Weismann's promotion of the idea of the all-sufficiency of natural selection, Weismann seems to have derived this position more from his evaluation of the embryological evidence for the isolation of the germ plasma than from his background as a naturalist.

On the other hand, there is additional evidence to support Mayr's main contention. For example, he could have pursued Weismann's case further into the history of biology has been exaggerated. Contrary to the notion promoted in many biology texts, neither Weismann nor his contemporaries

felt that the inheritance of acquired characters was disproved when Weismann cut off the tails of mice for successive generations and found that this had no effect on the tail-length of the mice of the next generation. A careful study of the respective roles of experimentation, alternative explanatory frameworks and other factors in the twentieth-century decline of belief in the inheritance of acquired characters still needs to be undertaken.

Mayr's book is a book of great erudition and insight. No other single volume offers such an extensive account of the history of the subject as a question while providing as penetrating a view of the nature of the issues involved in these subjects. If the book has a conspicuous weakness, it is how little it has to say about the sociology of scientific activity and the broader social and cultural context of the scientific enterprise.

Whether Mayr's appeal on behalf of the non-experimental and non-mathematical side of biology will have any effect on the behaviour of future generations of biologists remains to be seen. In most areas of biology today, the tide seems to be running in the other direction. Interestingly enough, how the tide runs in the future will be determined not only by the kinds of conceptual issues that Mayr has raised so well in this book but also by the various social and political dimensions of science which he says less about, and which still remain to be illuminated.

Richard W. Burkhardt, Jr is associate professor and chairman of the Department of History at the University of Illinois at Urbana-Champaign.

Greatly elaborated, this basic point forms the core of the work under review, which deals with the changing views of seventeenth-century English intellectuals about the possibility of acquiring certain knowledge. In the context of more critical attitudes towards evidence in general.

Since the 1960s Barbara Shapiro has looked at law and at historical writings in the seventeenth century and she has brought these disciplines as well as science and religion into her new book, arguing that comparable changes occurred in these areas.

The volume certainly reflects wide reading on a range of topics which are rarely brought together, and the text and footnotes are full of interesting information and references. On the other hand, though worthy of a place in a library, the book is a little too long, and it is not always clear why it is so long. Even the central theme of "probability" was originally suggested to Shapiro by the earlier work of another scholar, Henry van den Broek, and she has been accused of "over-reliance" on his work. Shapiro's chapter on the subject of "probability" is not only a commendable, but also a

ing anxiety about the acceptability of evidence was a major factor in the decline of witchcraft prosecutions in the seventeenth century. As for the epistemology of the new science - Shapiro really has little to say that is novel.

Here a further difficulty arises, for in the exposition of the epistemological ideas of scientists, theologians, historians, lawyers and others that comprises the bulk of the book, Shapiro has an unfortunate tendency to fall between two stools. The basic trends which the author claims link these different disciplines could have been summarized more briefly, as rather tedious. On the other hand, the book's full operation at too general a level "do justice to any single field by fully integrating a discussion of the methods of the content and content of the studies involved. There is a decidedly old-fashioned air about Shapiro's rather disembodied exposition of the ideas of successive thinkers on her chosen theme.

Finally, the book is rather inconclusive, since Shapiro devotes disproportionately little space to placing the changing views that she documents in context, or to trying to

explain them. The analysis of the European background to the ideas of the English authors surveyed here is haphazard, and one is never sure how far Shapiro is claiming that the late seventeenth-century English thinkers were unique and innovative, or how far she is merely documenting an insular version of a more general shift in European ideas.

On the question of causation, Shapiro is unwilling to attribute primary to any of the fields she covers. The fact that the book begins with science is apparently purely arbitrary, and the book's general message is that changes that she deals with, though interconnected, occurred in different disciplines. But if comparable changes took place in the same time in various more or less academic fields, what does this say about the relations between intellectuals and the society in which they lived? Did they merely reflect broad and inexorable shifts in ideas in society at large, or did they lead to

Michael Hunter

Michael Hunter is lecturer in history at Birkbeck College, London.

BOOKS

Positive polls

Decade of Dealignment: the Conservative victory of 1979 and electoral trends in the 1970s by Bo Sörvik and Ivor Crewe
Cambridge University Press, £27.50
ISBN 0 521 22674 0

Expanding and Predicting Elections: issue effects and party strategies in 23 democracies by Ian Budge and Dennis J. Farlie
Allen & Unwin, £18.00
ISBN 0 04 324008 9

Essex University is where political scientists do things with numbers. Oversimplifying heroically, there are three main ways to do it, all practised at Essex. There is formal, logical thinking in political theory - about equality, democracy, anarchism, for instance; there is statistical analysis of survey data; and there are attempts to mimic econometric modelling based on linear regression equations. Here we have one representative each of the second and third schools. One succeeds; the other doesn't.

Decade of Dealignment is the long-awaited report of the British Election Survey for 1974 and 1979. So long-awaited that it appears only as we are digesting 1983: which, luckily, confirms the book's main themes to the last dotting of an i. The British Election Survey has run since 1963 (formerly financed by the Social Science Research Council, it has just been saved from extinction by Robert Maxwell). It is a unique panel survey (that is, it returns and re-interviews the same respondents at the next election) of the electorate's personal history, current preferences, and views about the issues. Earlier waves were reported in Butler and Stokes' *Political Change in Britain* (second edition, 1974), which set new standards in the study of voting. *Decade of Dealignment*, like the earlier work, is full of good things and it proves again that panel surveys refresh the parts that Gallup can't reach. Only by going twice or more to the same people can you get reliable estimates of the crosscutting political movements which add up to an inter-election "swing".

Swing is not just direct switching. It includes movements into and out of minor-party voting, of abstention, and of the electorate itself. Hardly anybody noticed one of Butler and Stokes's main findings, namely that the decline of the Labour Party goes back to 1959. Labour's continuous loss of ground since then has been masked by the turnover of the electorate as old Tories die (or go to prison, or become peers) and young (or immigrant, or ex-peace) socialists take their places. The new book confirms this. Labour's "advance" in 1974 was due only to electoral turnover. If the 1970 electorate had voted in 1974, the Tories would have increased their majority.

Class still shapes British voting, but more weakly with every election that passes. Occupational class is still the best predictor of voting, and this book confronts some modish alternatives with inconvenient facts. For instance, public sector workers and their families are only 5 per cent more pro-Labour than private sector. Unfortunately, Crewe and Sörvik do not test regional, or ethnic, or centrist-peripheral differences.

Decade of Dealignment breaks new ground because it listens to what the voters think. The old model was strictly non-ideological. "Political change in Britain" (or any other democracy) was due not to voters changing their minds or parties ceasing to offer them what they wanted, but to changes in the franchise (thus Labour got its break in 1918), to social mobility, differential mortality and fertility. Tories live longer (for instance) than Labour supporters, and while the Labour supporter expires earlier (12), but Labourites have more children. Makes a baby for Labour, as Alan Watts headed his review of Butler and Stokes.

That picture was always incom-

BOOKS

Striking by numbers

Strikes in Europe and the United States: measurement and incidence by Kenneth Walsh
Frances Pinter, £15.75
ISBN 0 86187 290 8

In 1924, the International Labour Office (ILO) issued guidelines for the collection of strike statistics. Governments adopted them selectively and sometimes whimsically; they are now antiquated; and more recent efforts by supranational agencies to cajole or induce governments into standardized practice have been half-hearted or maddening. Little Englanders will rejoice to hear that this includes the Statistical Office of the European Economic Community.

Varying practice in the community nation partly reflects bureaucratic inertia. But some countries would show up spotier in the international comparisons for strike-free beauty (which is judged by multinational investors) if they altered their official classifications and procedures. France not only excludes political strikes from published government figures - Britain does too - but also stoppages in agriculture and national and local government services. Acceptance of a standard threshold for inclusion, that is to say the sort of work for how long to get themselves officially enumerated as a strike, would, depending upon what the threshold was, quite probably modify sharply the images countries currently have for the record of industrial conflict. For their record, Britain, Italy and Ireland, which have the highest reported stoppage levels in the community, also have, in Dr Walsh's judgement, the most stringent recording procedures.

So far as he sticks to these issues, Dr Walsh does a thoroughly professional job and fills a real need for a handy reference work on the technical pitfalls in these national statistical series. In a first part, the general problems that arise in making international comparison of strike activity are given a straightforward treatment. A lengthy second part lists for each in turn the methods of collection used by member countries (except Luxembourg in 1972 and tabulates key strike activity data for the period 1972-81. To locate the material in a wider framework, this information is supplied for the United States also.

There then follows a far less helpful third part, where Walsh embarks upon a comparative discussion. The author himself candidly expresses hesitations in so doing, and repeatedly frets over whether his demonstration of the incomparability of these data sets has been so thorough that he will look eccentric by then proceeding to compare them. This self-censorship is misplaced. The real trouble is that the author is obviously far less at home with the institutional and social aspects of industrial relations, with international comparison in social science, and with the more recent literature on these topics.

As Walsh himself points out, national methods of strike-data collection are fairly stable over time. This one is entitled to pay special attention to trends that recur from one society to another. It is at this point that statistically less "cautious" but sociologically more imaginative investigators will find the data exceptionally tantalizing. How much have strike rates fallen in

BOOKS

Positive polls

Decade of Dealignment: the Conservative victory of 1979 and electoral trends in the 1970s by Bo Sörvik and Ivor Crewe
Cambridge University Press, £27.50
ISBN 0 521 22674 0

Essex University is where political scientists do things with numbers. Oversimplifying heroically, there are three main ways to do it, all practised at Essex. There is formal, logical thinking in political theory - about equality, democracy, anarchism, for instance; there is statistical analysis of survey data; and there are attempts to mimic econometric modelling based on linear regression equations. Here we have one representative each of the second and third schools. One succeeds; the other doesn't.

Decade of Dealignment is the long-awaited report of the British Election Survey for 1974 and 1979. So long-awaited that it appears only as we are digesting 1983: which, luckily, confirms the book's main themes to the last dotting of an i. The British Election Survey has run since 1963 (formerly financed by the Social Science Research Council, it has just been saved from extinction by Robert Maxwell). It is a unique panel survey (that is, it returns and re-interviews the same respondents at the next election) of the electorate's personal history, current preferences, and views about the issues. Earlier waves were reported in Butler and Stokes' *Political Change in Britain* (second edition, 1974), which set new standards in the study of voting. *Decade of Dealignment*, like the earlier work, is full of good things and it proves again that panel surveys refresh the parts that Gallup can't reach. Only by going twice or more to the same people can you get reliable estimates of the crosscutting political movements which add up to an inter-election "swing".

Swing is not just direct switching. It includes movements into and out of minor-party voting, of abstention, and of the electorate itself. Hardly anybody noticed one of Butler and Stokes's main findings, namely that the decline of the Labour Party goes back to 1959. Labour's continuous loss of ground since then has been masked by the turnover of the electorate as old Tories die (or go to prison, or become peers) and young (or immigrant, or ex-peace) socialists take their places. The new book confirms this. Labour's "advance" in 1974 was due only to electoral turnover. If the 1970 electorate had voted in 1974, the Tories would have increased their majority.

Class still shapes British voting, but more weakly with every election that passes. Occupational class is still the best predictor of voting, and this book confronts some modish alternatives with inconvenient facts. For instance, public sector workers and their families are only 5 per cent more pro-Labour than private sector. Unfortunately, Crewe and Sörvik do not test regional, or ethnic, or centrist-peripheral differences.

Decade of Dealignment breaks new ground because it listens to what the voters think. The old model was strictly non-ideological. "Political change in Britain" (or any other democracy) was due not to voters changing their minds or parties ceasing to offer them what they wanted, but to changes in the franchise (thus Labour got its break in 1918), to social mobility, differential mortality and fertility. Tories live longer (for instance) than Labour supporters, and while the Labour supporter expires earlier (12), but Labourites have more children. Makes a baby for Labour, as Alan Watts headed his review of Butler and Stokes.

That picture was always incom-

BOOKS

Striking by numbers

Strikes in Europe and the United States: measurement and incidence by Kenneth Walsh
Frances Pinter, £15.75
ISBN 0 86187 290 8

In 1924, the International Labour Office (ILO) issued guidelines for the collection of strike statistics. Governments adopted them selectively and sometimes whimsically; they are now antiquated; and more recent efforts by supranational agencies to cajole or induce governments into standardized practice have been half-hearted or maddening. Little Englanders will rejoice to hear that this includes the Statistical Office of the European Economic Community.

Varying practice in the community nation partly reflects bureaucratic inertia. But some countries would show up spotier in the international comparisons for strike-free beauty (which is judged by multinational investors) if they altered their official classifications and procedures. France not only excludes political strikes from published government figures - Britain does too - but also stoppages in agriculture and national and local government services. Acceptance of a standard threshold for inclusion, that is to say the sort of work for how long to get themselves officially enumerated as a strike, would, depending upon what the threshold was, quite probably modify sharply the images countries currently have for the record of industrial conflict. For their record, Britain, Italy and Ireland, which have the highest reported stoppage levels in the community, also have, in Dr Walsh's judgement, the most stringent recording procedures.

So far as he sticks to these issues, Dr Walsh does a thoroughly professional job and fills a real need for a handy reference work on the technical pitfalls in these national statistical series. In a first part, the general problems that arise in making international comparison of strike activity are given a straightforward treatment. A lengthy second part lists for each in turn the methods of collection used by member countries (except Luxembourg in 1972 and tabulates key strike activity data for the period 1972-81. To locate the material in a wider framework, this information is supplied for the United States also.

There then follows a far less helpful third part, where Walsh embarks upon a comparative discussion. The author himself candidly expresses hesitations in so doing, and repeatedly frets over whether his demonstration of the incomparability of these data sets has been so thorough that he will look eccentric by then proceeding to compare them. This self-censorship is misplaced. The real trouble is that the author is obviously far less at home with the institutional and social aspects of industrial relations, with international comparison in social science, and with the more recent literature on these topics.

As Walsh himself points out, national methods of strike-data collection are fairly stable over time. This one is entitled to pay special attention to trends that recur from one society to another. It is at this point that statistically less "cautious" but sociologically more imaginative investigators will find the data exceptionally tantalizing. How much have strike rates fallen in

That picture was always incom-

BOOKS

Striking by numbers

Strikes in Europe and the United States: measurement and incidence by Kenneth Walsh
Frances Pinter, £15.75
ISBN 0 86187 290 8

In 1924, the International Labour Office (ILO) issued guidelines for the collection of strike statistics. Governments adopted them selectively and sometimes whimsically; they are now antiquated; and more recent efforts by supranational agencies to cajole or induce governments into standardized practice have been half-hearted or maddening. Little Englanders will rejoice to hear that this includes the Statistical Office of the European Economic Community.

Varying practice in the community nation partly reflects bureaucratic inertia. But some countries would show up spotier in the international comparisons for strike-free beauty (which is judged by multinational investors) if they altered their official classifications and procedures. France not only excludes political strikes from published government figures - Britain does too - but also stoppages in agriculture and national and local government services. Acceptance of a standard threshold for inclusion, that is to say the sort of work for how long to get themselves officially enumerated as a strike, would, depending upon what the threshold was, quite probably modify sharply the images countries currently have for the record of industrial conflict. For their record, Britain, Italy and Ireland, which have the highest reported stoppage levels in the community, also have, in Dr Walsh's judgement, the most stringent recording procedures.

So far as he sticks to these issues, Dr Walsh does a thoroughly professional job and fills a real need for a handy reference work on the technical pitfalls in these national statistical series. In a first part, the general problems that arise in making international comparison of strike activity are given a straightforward treatment. A lengthy second part lists for each in turn the methods of collection used by member countries (except Luxembourg in 1972 and tabulates key strike activity data for the period 1972-81. To locate the material in a wider framework, this information is supplied for the United States also.

There then follows a far less helpful third part, where Walsh embarks upon a comparative discussion. The author himself candidly expresses hesitations in so doing, and repeatedly frets over whether his demonstration of the incomparability of these data sets has been so thorough that he will look eccentric by then proceeding to compare them. This self-censorship is misplaced. The real trouble is that the author is obviously far less at home with the institutional and social aspects of industrial relations, with international comparison in social science, and with the more recent literature on these topics.

As Walsh himself points out, national methods of strike-data collection are fairly stable over time. This one is entitled to pay special attention to trends that recur from one society to another. It is at this point that statistically less "cautious" but sociologically more imaginative investigators will find the data exceptionally tantalizing. How much have strike rates fallen in

That picture was always incom-

NEW INTERNATIONAL STUDENT EDITIONS FROM MCGRAW-HILL

TAUB: DIGITAL CIRCUITS AND MICROPROCESSORS	1983	£6.50
RICE: MATRIX COMPUTATIONS & MATHEMATICAL SOFTWARE	1983	£7.95
SALTON: INTRODUCTION TO MODERN INFORMATION RETRIEVAL	1983	£8.25
TARQUIN: ENGINEERING ECONOMY 2/E	1983	£8.85

To order your inspection copies please write to the address below stating course taught and student numbers.

McGraw-Hill Book Company (UK) Limited, Shoppenhangers Road, Maidenhead, Berkshire, SL6 2QL.



BOOKS

Europe's empires

British, Europe and the World, 1850-1921: delusions of grandeur
by Bernard Porter
Allen & Unwin, £10.00
ISBN 0 04 909011 9

The main argument of Bernard Porter's extended, interpretative essay is that "Britain's decline derived from fundamental, ineradicable and eventually fatal contradictions in her situation, so that the more she struggled at the end of the rope, the tighter the knot became." What the word "contradictions" seems to imply in this context is that developments in the British Empire stimulated other countries to behave in a way which - whether those others intended it or not - eventually led to the empire's destruction.

In the mid nineteenth century, his argument runs, British imperialism was essentially liberal. The object of acquiring empire was not to win special advantages at the expense of other imperial powers, but to create conditions within which traders - British, indigenous or foreign - could conduct business. Other European powers, impressed by Britain's prosperity, developed empires of their own; but these empires, unlike the free trade British Empire, were closed economic systems. It would be interesting to learn why those Europeans struck out in that direction; but from Britain's point of view the effect was "the transformation of a commercial empire into a territorial one." What the author does not show quite so convincingly is why this "contradiction" produced that particular effect.

He seems to argue that adverse economic developments during the 1870s played a critical part, and he is probably right.

By the turn of the century, the other European empires "all seemed threatening, for different reasons: Russia out of ambition, France out of resentment, Germany out of jealousy." The British retorted at first with a brash and ugly jingoism which reached its epitome in the Boer War, but later through enemies with France and Russia. Alas, the vital enmity with Germany was never achieved.

During the interwar period the British Empire also lost its free trade character, and the author reminds us of a German diplomat on the eve of the Second World War who foretold that Britain would lose her empire even if she won that war. The remainder of the story is, in a sense, the working out of that prophecy. In the end, the empire fell apart, while the mother-country drifted into the EEC which, as Bernard Porter observes, "was very little different from an imperial customs union, except that it was adapted to Britain's particular interests less."

The argument that "contradictions" eventually led to Britain's imperial collapse is made forcefully and well. What is not argued so closely is the author's contention that they were fundamental and ineradicable. There were points along the line when serious alternatives did present themselves. Perhaps the free trade empire could have joggled along happily for many years if statesmen had given more attention to social problems at home, and less attention to European diplomacy. Perhaps if Britain had sought enmity with Germany as eagerly as she sought enmity with France and Russia, the 1914 war could have been averted.

Perhaps it lay in Britain's power to pursue different economic and/or foreign policies in the 1930s, which could have averted the 1939 war, or at least kept Britain out of it. If

these alternatives had been taken, there is something to be said for the view that a liberal British Empire could have formed the nucleus of a liberal world, and not withered into impotence.

There are some oddities of language - "A fully-fledged frog" and "papering over the dilemma" - and some inaccuracies - Roosevelt was absent from Potsdam for the very good reason that he was dead; the important protection given by the 1906 Trade Disputes Act was against liability in tort, not in contract.

Roy Douglas

Roy Douglas is reader in the department of general studies at the University of Surrey.

The pope's downfall

England against the Papacy 1858-1861: Tories, Liberals, and the overthrow of papal temporal power during the Italian Risorgimento
by C. T. McIntire
Cambridge University Press, £20.00
ISBN 0 521 24237 1

C. T. McIntire deals with a period in which an English Tory government, formed when the Protestant and protectionist rump was still near the peak of its influence in the Tory party, was succeeded by a Whig government in which Palmerston was solidly, and Russell flamboyantly, anti-papal, and Gladstone had recently undergone a permanent conversion to the Risorgimento after personally inspecting the evils of government in Rome and Naples.

It was true that (as Russell constantly insisted in public) Britain had interests in Italy, even in the papal states - the Anglo-Roman Gas Illumination Company trained Italians to turn "English" wrought-iron "fountains" into gas lamps and there were English interests in the Spanish railway which built the papal railway from Rome to Civita Vecchia. But British economic interests in Italy were really marginal, and Mr McIntire is therefore right to ascribe the substantial role played by the governments of Derby and Palmerston in the downfall of the temporal power of the papacy to ideological hostility, and he has no difficulty in showing that some even of the more loud flights of Protestant imaginations were to be detected in high political quarters that ought to have known better.

Coupling this with the knowledge of hindsight that the united, parliamentary Italy of the House of Savoy was a good deal less inviting than the English liberals expected, and with a detailed diplomatic narrative based on all the sources available, which shows that the British Government was frequently caught out by the daily development of events, he creates the impression that Plus IX was the hapless victim of a gang of mindless Orange bullies. And it is not difficult to use the papal sources to create a story (in the non-party sense) view of the events to show how easy it was for committed minorities in the Italian National Society to get up local revolts, and to legitimise their "by cooking the voting in plebiscites" to secure almost unanimous approval for the annexation of papal territory by Sardinia. The implied conclusion is that this mixture of jealousy and incompetence could hardly be expected to produce anything other than the rather unlovely Italy of the generations up to Mussolini.

The strength of the book is Mr McIntire's diplomatic narrative which adds much circumstantial detail to what has been known already; its weakness is that the narrative is accompanied by an analysis of the aims and the limitations of the various powers involved. At least one of the British ideological objects, for instance, was not foolish. There have been sharp limits to religious toleration in Italy over the last century; without such process of actual toleration, in the period of the book, Italy would never have been united.



The second issue of the Russian Journal *Leshii* (Woodgoblin) bore this cartoon on its cover. It is one of many arresting graphic designs of the period brought together in David King and Cathy Porter's book *Blood and Laughter: caricatures from the 19th Revolution* (Cape, £12.50 and £5.95).

It is hinted that British assumptions that papal government was incompetent were untenable, but that government is shown to have alternated between insisting it could govern its subjects if left alone, and asking others to govern for it, and proved in the event to have small powers of resistance. The long-term prospects for Habsburg domination of Italy were clearly no better than for the rest of their polyglot domain, and the Habsburgs are shown there to acknowledge the fact. Nor is the cost of Plus IX policies reckoned here. French Catholics spent a decade agitating in favour of the temporal power which they should have spent in coming to terms with industrial society, while Irish volunteers, those unpredictable lions under the papal throne, went back home to become Fenians. In short, Mr McIntire offers a monograph strong on detail, much less strong on wider perspective.

W. R. Ward

W. R. Ward is professor of history at the University of Durham.

Following Hitler

Stormtroopers: a social, economic and ideological analysis 1929-1935
by Conan Fischer
Allen & Unwin, £20.00
ISBN 0 04 943028 9

A few years ago Conan Fischer published an important article in which he attempted to demonstrate, with appropriate statistical tables, that the Nazi stormtroopers' organization (SA) was composed largely of workless men. In his present book, Fischer uses his statistical work on the occupation of Germany, of stormtroopers to explain the functions of the SA while in the Nazi movement as a whole. In the process, he challenges a number of assumptions about the rise of National Socialism.

Fischer's thesis can be summarized roughly as follows: The SA membership was in large measure workless, both before and after 1933. It was material deprivation which gave rise to "outrage against the Weimar political system" and drove hundreds of thousands of young unemployed proletarians into the Hitler movement. This meant that the SA recruited from among the "same groups as did the Communists, which helps explain the bitter rivalry between them: the organization brought into the Nazi movement large numbers of young men with revolutionary aspirations; there was a significant social divide between the working-class rank-and-file and the middle-class leadership of the SA made it an effective political instru-

ment for the capture of political power but unsuited to play a constructive role in the emerging Third Reich.

There is much to be said for such an interpretation. Undoubtedly there were large numbers of workers in the SA. Any organization which, during a period of mass unemployment, could recruit hundreds of thousands of young men was bound to have large numbers of "workers" in its ranks. Furthermore, Fischer's suggestion that the bitterness of the street violence between Communists and Nazis was "possibly produced by competition for the same social groups... rather than the product of class conflict" should be taken seriously by historians who too easily link political positions with class. And Fischer's finding that, after Hitler captured power, membership in the SA often was a positive hindrance to getting a job provides an important insight into the chaotic months of 1933-34.

However, Fischer's work also gives rise to a number of questions. To begin with, in a book which bases its examination of a political organization upon an analysis of the class background of its members, remarkably little is said about what class determined almost solely by occupation. But is this very limited definition, what most social historians understand by class?

As Fischer freely admits, his statistical work "obviously falls short of the techniques of stratified random sampling employed by the contemporary social scientists". Of his statistics on the SA before the Nazis came to power, more than half concern stormtroopers in Munich in 1932. This makes all the more disturbing the tendency to elide the pre and post-1933 SA. Fischer probably would argue that, since the social composition of the SA did not change markedly with Hitler's coming to power, 1933 did not make that much difference. But the fact that the Nazis had come to power meant that motivations for joining the organization changed considerably after January 1933.

Perhaps the most fundamental problem concerns the attempt to draw conclusions about political behaviour from occupational background. Fischer seems to assume a fairly unproblematic connection between material deprivation and political radicalism. But how is it to reconcile observations of tremendous apathy among the unemployed during the depression with Fischer's picture of hundreds of thousands of young workers driven by unemployment to radical political activism? The process which give rise to political violence are rather more complex than Fischer's model would allow.

Richard Bessel

Richard Bessel is lecturer in history at the Open University.

BOOKS

EDUCATION

Humanities in school

Authentic Education and Emancipation: a collection of papers by Lawrence Stenhouse
Heinemann Educational, £12.50
ISBN 0 435 80854 0

The late Lawrence Stenhouse, teacher turned educational researcher, was probably best known for his leadership of the Humanities Curriculum Project in the late sixties and early seventies. This project, jointly funded by the Nuffield Foundation and the Schools Council, was given special urgency by the decision to raise the school leaving age to sixteen. The present volume takes that project, its inspiration, its promotion and evaluation, as its focus.

The book begins with a foreword, which is really Stenhouse's academic autobiography, and this is followed by 16 pieces of work most of which have been published before. These items are grouped into three parts, each part pertaining to a different period of the author's work (roughly pre-project, project, and post-project) and each having its own brief editorial introduction.

Two principal educational aspirations, one egalitarian and one liberal, are expressed in Stenhouse's book. The egalitarian aspiration is that the schools should aim to make the benefits to be derived from an education in humanities (which Stenhouse claims have been largely confined to an elite) much more widely available, and in particular to those pupils directly affected by the raising of the school leaving age. The liberal aspiration is seen as complementing the egalitarian one: that a new method or style of teaching should be devised, especially for 15-16-year-olds about to leave school, which treats pupils/students as young adults and minimizes reliance on the authority of the teacher.

In the Humanities Curriculum Project it was proposed that the first aspiration could be met by devising a programme of study based on an examination of controversial human issues likely to engage the attention of older pupils/students, such as war, education, the family, and relations between the sexes. The second aspiration was to be met by proposing that the examination of such controversial issues should proceed by pupil/student discussion with the object of requiring the participants, as far as possible, to "think for themselves" about these issues. The teacher, on the other hand, was conceived as a "neutral" chairman who might nevertheless challenge the participants to produce evidence or grounds to support the claims they make. These discussions were to be supported by packs of material - what Stenhouse often calls "evidence" - drawn from the field of humanities (social studies, arts and religion).

In so far as Stenhouse's book is an account of the development and implementation of the ideas (the "theory") behind the project (which it largely is) it is distinctly thin. There is a persistent vagueness about many of the ideas; as



Lawrence Stenhouse

absence of sustained and detailed argument for the points of view presented, and occasionally, plain evasiveness in dealing with difficulties others have raised about some of the project's leading ideas - for example, the idea of teacher neutrality.

Take the notion of humanities itself. The term is defined by a list (social studies, arts, religion); there is no systematic discussion of the educational value of the humanities; and apart from a quotation from the 1910 edition of the *Encyclopaedia Britannica* there is no reference to renaissance humanism where claims for the humanities

were first staked out. True enough, there are allusions to arguments for the educational value of the humanities which resemble those in the found in P. H. Hirst's paper "Liberal Education and the Nature of Knowledge" - but they remain allusions to arguments, not arguments themselves.

In the context of the project itself, humanities subjects owe their justification to the fact that they can be quarried for materials to be used in the discussion of controversial human-interest issues - out of which the emancipation of the book's title is supposed to come. But if emancipation really is the object, rather than the humanities (about which Stenhouse communicates no real passion), then what the book lacks is a systematic discussion of what the author conceives to be the relation between knowledge and freedom.

The title of Stenhouse's book promises considerably more than the book delivers. Those who turn to it in the hope of finding a reasonably cogent account of some aspects of liberal progressive educational thought in the sixties and seventies will be disappointed. An historian of education, peering over the remains of the period, might find it revealing.

Grenville Wall

Grenville Wall is head of the school of philosophy and religious studies at Middlesex Polytechnic.

Gaining a PhD

How the PhD Came to Britain: a century of struggle for postgraduate education
by Renate Simpson
Society for Research into Higher Education, £9.75
ISBN 0 900868 95 3

It is difficult today to imagine postgraduate research without the PhD degree and its accompanying thesis. Yet the PhD was a latecomer to the British university scene; it was introduced only at the end of the First World War, imposing a standardized pattern on research activities which were already complex and well-developed. In this useful monograph Renate Simpson speaks of a "century of struggle", but it was not really until the 1880s and 1890s that the research ideal of the German universities, the home of the PhD, began to make an impact on British discussions of university reform, and the same decades saw the first of many calls for the promotion of scientific research and advanced training to prevent Britain falling behind her industrial rivals.

The background to the story is familiar, but Simpson breaks new ground in showing how the idea of a postgraduate phase of study was gradually clarified, and she brings together much scattered material from university archives in order to trace the developments in individual universities. At Oxford and Cambridge, devotion to the ideal of liberal education and a grudging attitude to graduates of other universities were obstacles to progress, but there were bolder initiatives in London, Manchester, and Birmingham. It was in the 1890s, it would seem, that something like the modern pattern of postgraduate research became recognizable. Much

depended on finance, to build laboratories and to support research students, and what became available owed more to private benefactors than to the state; in Scotland, for example, the situation was transformed in the 1900s by the research grants of the Carnegie Trust.

Each university had its own degree scheme, but none had a PhD. Simpson's most interesting finding is that the campaign for such a degree was not based on the demands of pure research, or the need to train academics, but on the desire to attract more overseas students to whom the existing masters' degrees (which carried no status abroad) or higher doctorates (which took too long) had little to offer. In the 1900s, there was much talk of the need to keep colonial students loyal to the universities of the metropolis, and Oxford took a special interest in this question after the Rhodes scholars began to arrive. But it took the First World War to bring the issue to a head, as it raised the tempting prospect of diverting the stream of German postgraduates from Germany to Britain. The Foreign Office under A. J. Balfour began to prod the universities, and the PhD scheme was the result of two university conferences in 1917 and 1918. Although not all the universities were equally enthusiastic, the PhD was significant as the first degree to have a standard national form, and the whole episode shows how in the atmosphere of war and reconstruction the universities were forming a closer association with each other and with the state.

Renate Simpson does not go beyond 1918, apart from a brief postscript which points out the unanticipated popularity of the new degree with British students, but her book is a welcome addition to the handful of studies which discuss British university history on a national scale.

Robert Anderson

Dr Anderson is lecturer in history at the University of Edinburgh.

Fast forward

Video: the educational challenge
by Robin Moss
Croom Helm, £12.95
ISBN 0 7099 1747 3

Ostensibly about video, this very readable book is a polemic against the inadequacy of current teaching methods in meeting the challenges of the next twenty years or so. Robin Moss argues that video should be at the centre of teaching activities, thereby helping to fill the balance away from "teacher-centred" education towards "learner-centred" study.

Moss argues that video has the potential to stimulate and support individual study, by motivating learners to be self-reliant, to satisfy their natural curiosity, to initiate their own studies. He is frank about the relative failure to date of the educational television units in universities, and of educational broadcasting - interesting views from someone who has just left one such unit to become head of educational programme services at the Independent Broadcasting Authority - but he argues that advances in video technology, and increased familiarity with video equipment, will overcome many of these previous limitations in classrooms and colleges. However, it is the potential of video for non-formal and continuing education, for learning outside the classroom, which most excites the author.

The weakness of the book is that it rarely suggests precisely how this potential is to be realized. As well as ostrich-like attitudes, there are serious structural and training obstacles to be overcome before video can be used in the ways proposed. There is little discussion in the book about how one would design a curriculum around video, nor how one would design individual video programmes to achieve "learner-centred" education.

This book is a useful counterbalance to the current emphasis being given to computers in education. Video is a second front in the Information Technology revolution, and needs to be taken just as seriously as computing.

A. W. Bates

Dr Bates is reader in media research methods at the Open University's Institute for Educational Technology.

Heinemann

Theory and Resistance in Education

A Pedagogy for the Opposition
HENRY A. GRIFFIN, Boston University
Foreword by Paulo Freire

This book will find a ready market in sociology of education, curriculum studies and social and political education courses and amongst radical educators.

It fills the gap in the existing literature by combining theoretical analysis in the sociology of education with an exploration of its implications for radical pedagogy.
cased £15.00 paper £8.50

Testing Children

Standardised Testing in Local Education Authorities and Schools
CAROLINE GIPPS, STEPHEN STEADMAN, YESSA BLACKSTONE and BARRY STIERER, University of London Institute of Education

A book for teachers, local authority advisers and officers, educational policy-makers and educational psychologists. Examines the ways tests are used to monitor standards in schools, to screen children, to aid transfer between schools and for accountability purposes.

It reviews present practice and policy in testing, discusses the attractions and limitations of standardised testing and offers practical advice to local education authorities and schools.
cased £14.50

Authority, Education and Emancipation

LAWRENCE STENHOUSE
This collection of papers, the last book that Lawrence Stenhouse worked on before his untimely death, is evidence of a line of thinking which he pursued in various professional contexts. The book is a rich source of material for students of curriculum studies and all involved in education and educational research.

Three discernible themes are brought together in the compelling and provocative final papers: one theme is the emancipation of pupils and students through knowledge; another is the need for teachers, at all levels, to regard teaching as "an experiment"; and the third is that, in research, achievement is provisional - no more and no less than "the best camp for the next advance".
cased £12.50

Sex Differentiation and Schooling

Edited by MICHAEL MARLAND, Head, North Westminster Community School, London

This international symposium brings together research from some of the most important workers in the field of sex differentiation and schooling. Many of the strategies considered are to do with changing attitudes, as much as direct curricular and organizational changes, to try to make schooling and the opportunities for learning more equal for both girls and boys, so as to achieve more nearly the fundamental educational aim of meeting the individual needs of children.
cased £10.50

HEINEMANN EDUCATIONAL BOOKS

Freemantle, The Windmill Press, Kingston, Surrey, England KT20 8BR

CHICAGO

The Transformation of Higher Learning, 1860-1930: Expansion, Diversification, Social Opening and Professionalization in England, Germany, Russia and the United States
Konrad Jarausch, June 1983, £24.00

A Feminist Perspective in the Academy: The Difference it Makes
Elizabeth Langland & Walter Grove, editors April 1983, £13.60 (£4.80 paper)

A Calculating People: The Spread of Numeracy in Early America
Patricia Clute Cohen March 1983, £18.00

The Rise of Literacy and the Common School in the United States
Leo Soltow & Edward Stevens 1982, £11.95

The Imperfect Union: School Consolidation & Community Conflict
Alan Peshkin January 1983, £13.60

The National Society for the Study of Education
NSSE 82nd Yearbook Part II: Individual Differences and the Common Curriculum
Gardar D. Fenstermacher & John I. Goodlad, editors June 1983, £14.40

Part II: Staff Development Gary A. Griffin, editor June 1983, £13.60

University of Chicago Press
126 Buckingham Palace Road
London SW1W 9SD

CHICAGO

John Wiley & Sons Limited
Baffins Lane, Chichester, Sussex PO19 1UD, England

EDUCATION

Child centred

Lankshar's purpose is to challenge the received opinion that children are made free by being restrained and directed - that a formal educational setting and a compulsory curriculum promote the development of their

The Economics of Education

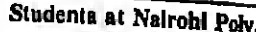
Can the 'costs' of education be quantified? Can its 'output' be measured, and can the two then be related? This introduction will be excellent reading for anyone interested and involved in educational spending. It does not answer all the policy makers' questions, but presents in a fascinating manner the background of economic possibilities and constraints within which education works.

WYCKS, KENT IN13 IYY

Tell me in your own words

sequent chapters on the curriculum, teachers, vocational preparation, job-seeking and YOP are dealt in a similar vein by John Mann, recently secretary of the Education Council. Professor John Wilson of Keele University, W. Brd, a senior careers officer in Bank Field, MP and Collii Ball, director of the Centre for Employment Initiatives. These practitioners have been chosen as people in a position to have some

The first section of the book explores comparative perspectives in higher education, drawing on relations between third world countries and comparing their universities against the advanced nations. Expansion has occurred in all parts. This has frequently been noted and has led to the produc-



The final two chapters are devoted to university reform, one in general and one specifically devoted to India. The pressures for reform—to become more interdisciplinary, accountable, efficient, and relevant—are briefly sketched, and as resistance to change is discussed. The author's overall conclusion is that although there has been some measure of reform in the universities, the conservatism and inertia of most university systems have minimized their impact. Universities in the third world at the end of the century are unlikely to be radically different from those of the industrial nations in the 1980s.

University, Guildford, Surrey
GU2 5XH. 0483 39003

BOOKS

Barely a kind word

that pastoral care is poor. He quotes HMI as saying "one sixth were assessed very favourably", which is the usual way they report their five category rating scales, but Shaw inserts the word "only" in his own text before the HMI quote "one sixth" which makes it seem as if they disapproved of what they saw. Inspection of the original HMI report, however, shows that their actual conclusion was, "The overwhelming majority of schools recognize their obligations in this matter and give much thought to them, particularly through their systems of pastoral

Necessary change

The programme of study was wide-ranging, considering most aspects of higher education. Each of the main proposals which arose in these programmes is neatly condensed and an overall perspective of the future development of higher education is presented in the form of a report. The proposals seem highly rational, but the main ones will, of course, raise hackles. The eventual elimination of the binary divide by gradually merging the activities

They also review the implementation of the main report's recommendations. They point out that the attempt to achieve less specialization in the upper age ranges of English secondary schools is a sorry tale of bureaucratic incompetence, political interference, vested interests, and sets out how the schools failed to take into consideration the likelihood of generating adverse reactions. They also show that the notion of a two-year non-specialist degree will inevitably meet the same combination of obstacles. The fact that it should reduce unit costs, while offering many more places, as well as providing a better base for combining future study and work, is immaterial, if the opposition to its introduction cannot be overcome. The report also produces institutional managers who can not only think through solutions but actually implement them.

W. F. Denzilson is director of advanced studies in the school of education at the University of Newcastle.

School of prophets

Although at first glance it may seem that in this the colleges were simply continuing a medieval tradition, this was, in fact, far from the case. The medieval universities had educated the clerical elite – the dignitaries of both the regular and secular branches of the church. Few resident beneficed clergy were university graduates although the number was rising in the early sixteenth century. Foundations such as Corpus Christi College, Oxford – designed to produce educated parish clergy – represented a small move in

Those who read diligently in these pages will emerge with a good appreciation of the manner in which education was seen by the moderate puritans as vital to the realization of a true ministry. They will also be treated to vivid glimpses of daily college life:

Among the many undesirable things that hinder the progress of them that be studious of good learning, no little harm is done by the frequent converse of the young upon idle matters; for besides the waste of time . . . there is engendered in youthful minds an evil habit by which they are most easily diverted from serious things to frivolities and foolishness.

Dr O'Day is lecturer in history at the Open University.

Child Management in the Primary School

Tessa Roberts

June 1983 **Hardback £8.50** **Paperback £3.50**

Organising and Integrating the First School Day

Joy Taylor

October 1983 Hardback £12.00 Paperback £4.25

Relating to Learning

Towards a Developmental Social Psychology of the Primary School

Peter Kutnick

September 1983 Hardback £12.00 Paperback £4.50

Children and Schooling

Issues in Childhood Socialisation

Philip Gammage

1982	Hardback £15.00	Paperback £4.50
------	-----------------	-----------------

George Allan & Unwin (Publishers) Ltd.,
PO Box 18, Park Lane,
Hemel Hempstead, Herts HP2 4TE.

This monograph focusses specifically on the implications for women of the introduction into offices of a whole new generation of computerised equipment. It shows that while technology eliminates jobs, it does not eliminate work, and that women office workers whose jobs are at risk must therefore increase, through training, their technical and organisational knowledge and upgrade their skills thereby achieving greater job satisfaction.

liating some 230 institutions throughout the world, including government agencies, employers' organizations, trade unions, research institutions and university departments working in this field, the directory provides up-to-date information on staff, funding, activities, training programmes, current research projects, meetings and publications. It is arranged by country and has an acronym and personal name index.

Concerned with man in his working environment, this monograph touches on the disciplines of physiology, psychology, sociology, ergonomics, clinical medicine and systems engineering. It is intended for those needing a clear picture of the inter-relationships occurring between the tangibles and intangibles of work, job satisfaction and stress.

06/98 Marsham Street
London SW1P 4LY
Tel: 01-828 6401

Universities continued

THE UNIVERSITY OF PAPUA NEW GUINEA Port Moresby

Applications are invited from suitably qualified persons for the following posts:

LECTURER/SENIOR LECTURER IN SERVICE ENGLISH (Department of Language)

The Service English Section of the Language Department is involved in the teaching of courses in English Language and Study Skills to students of Preliminary Year Level (pre-University entry) and also to first year undergraduates in all Faculties. At first year level there are separate courses for students in Arts/Education, Science and Law. These courses are team taught and designed to prepare students for University level work in their chosen disciplines.

Applicants should have postgraduate qualifications in Applied Linguistics or English for specific purposes, with experience of teaching English as a Second Language in Developing Countries. The successful applicant will also be expected to have expertise in at least two of the following areas: Reading, Testing, Materials Writing.

The successful applicant will be expected to commence work in January 1984 initially for a period of three years.

LECTURER/SENIOR LECTURER IN HISTORY OF SCIENCE & TECHNOLOGY (Department of History)

Applicants should have a background in the history of European technology and scientific achievement. They should be ready to adapt their learning to suit the Melanesian context and willing to co-ordinate and teach the History of Science and Technology courses to Preliminary Year (pre-University entry) students. This course is a compulsory and basic foundation for University studies. Candidates should also be willing to teach in the same field at higher levels of the University programme.

TUTOR/LECTURER IN GEOGRAPHY/DEMOGRAPHY (Department of Geography)

The successful applicant will be required to teach courses in cultural, population and introductory geography and may be required to assist in the elementary numeracy skills course. Applicants should have a Master's degree or equivalent in Geography/Demography plus a working familiarity with Melanesian and the tropics.

SENIOR TECHNICAL OFFICER (MUSEUM) (Biology Department)

The successful applicant will be responsible for the teaching and maintenance of important research collections of Papua New Guinea animals. The successful applicant will also be responsible for the day to day liaison with the supervising architect during the construction of a new Natural Science Resource Centre. The post will also carry responsibilities for the day to day running of some laboratory classes.

Special emphasis will be given to an ability to supervise and train national technical staff in practical aspects of Museology.

Salary:
Senior Lecturer K18,720 pa plus gratuity
Lecturer Grade 2 K17,870 pa plus gratuity
Lecturer Grade 1 K16,020 pa plus gratuity
Senior Tutor Grade 1 K16,020 pa plus gratuity
Senior Technical Officer K16,846 pa plus gratuity
Tutor K13,700 pa plus gratuity

Other Conditions: The successful applicant will be offered a contract for a three-year appointment. The gratuity entitlement is based on 24% of salary earned and payable in instalments of lump sum and is taxed at a flat rate of 2%. In addition to the approved research, the main benefits include: support for reproduction of research; rent-free accommodation; appointment and assistance towards the cost of transportation; personal effect to airfare available after each 18 months of continuous service; home leave; six weeks annual leave; and a pension scheme; PMS or overseas salary continuation scheme to cover extended periods of absence.

Applications will be treated as strictly confidential and should include a full curriculum vitae, a recent small photograph and the names and addresses of three referees. In order to expedite the appointment procedure, applicants are advised to ask their referees to send confidential reports directly to the University without waiting to be contacted.

Applications should be forwarded to the Assistant Secretary (Staffing), University of Papua New Guinea, Box 320, University, Port Moresby, to reach him no later than 21st October 1983. Candidates should also send a copy of their applications to the Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF.

University of Oxford CAMDEN PROFESSORSHIP OF ANCIENT HISTORY

The election is intended to provide a permanent post for a senior scholar in the field of ancient history. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, Camden Professorship of Ancient History, 1, Wellington Square, Oxford OX1 2JF, by 15th October 1983. Further details may be obtained on request.

University of Oxford MERTON PROFESSORSHIP OF ENGLISH LANGUAGE

The Merton Professorship is intended to provide a permanent post for a senior scholar in the field of English language. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, Merton Professorship of English Language, 1, Wellington Square, Oxford OX1 2JF, by 15th October 1983. Further details may be obtained on request.

University of London University Entrance and School Examinations Council General Certificate of Education Examination

The Council invites applications for the following Chief Examiner appointments:

JUNE 1984
HINDI - ADVANCED AND ORDINARY LEVEL

JUNE 1985
HOME ECONOMICS - ADVANCED LEVEL
GEOGRAPHY, SYLLABUS A - ORDINARY LEVEL

JUNE 1986
GERMAN - ADVANCED LEVEL
MATHEMATICS - ADVANCED LEVEL
SPANISH - ADVANCED LEVEL
FRENCH - ORDINARY LEVEL
SPANISH - ORDINARY LEVEL

Applicants should be graduates or hold appropriate qualifications and should be under 65 with five years recent teaching experience. Examining experience essential. Duties include setting question papers, advising on the award of grades and may include the supervision of a team of examiners.

For application forms and further details write to The Secretary, University Entrance and School Examinations Council, University of London, 66-72 Gower Street, London WC1E 6EE. Applicants should enclose a self-addressed, stamped envelope. Completed application forms should be returned by 17 October 1983. Previous applications for any of the above posts need not re-apply since their applications will be considered with any new ones received.

UNIVERSITY OF EDINBURGH DIRECTOR OF FINANCE

Applications are invited for the post of Director of Finance. The Director of Finance will be a member of the Senior Administrative team called upon to advise on general policy matters in the University. Although responsible to the Secretary to the University, the Director of Finance will be expected to play the leading role in financial planning and control and will have close day-to-day contact with the Principal.

Whilst experience in University Administration could be an advantage, the work of the Director of Finance will be such that experience in other fields, such as Business or Industry, could be equally valuable. It is expected that the successful applicant will have suitable accountancy experience and preferably an accounting qualification.

The salary will be on the Administrative Grade IV Salary Scale (present minimum £17,276 per annum), together with superannuation benefits.

Further particulars may be obtained from the undersigned, with whom applications (ten copies) giving the names of three referees, should be lodged not later than 14th October, 1983. Please quote reference: 4011.

A. M. Currie
Secretary to the University
Old College, South Bridge
Edinburgh EH8 5YL

UNIVERSITY OF EAST ANGLIA LECTURER IN EDUCATION

Applications are invited for the above post in the School of Education from 1st January 1984 or as soon as possible thereafter.

The general responsibility of the post will be the development of the relationship between Information Technology and Curriculum Practice through teaching and research. Salary in the range £7,180-£14,126 p.a. plus USS benefits.

Applicants (three copies) giving full particulars of age, qualifications and experience, together with the names and addresses of three referees, should be sent to the Secretary, University of East Anglia, Norwich NR4 7TA (Tel: 0663 58161, 58162) from whom further particulars may be obtained, not later than 21st October 1983. No forms of applications are issued.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford BD9 4JT, by 15th October 1983. Further details may be obtained on request.

University of Southampton ENGINEERING MATERIALS A RESEARCH FELLOWSHIP

Is available from 1st October, or as soon as possible thereafter, in the Sub-Department of Engineering Materials to conduct research on the properties of aluminium alloys.

The research is supported by S.E.R.C. for a three year period at an initial salary of £7,630 p.a.

Applicants should have a degree in Metallurgy, Materials Science or a related subject and relevant research experience in metal casting processes. Applications (in duplicate) giving a brief curriculum vitae and the names of two referees to D. A. S. Copley, The University, Southampton SO9 4NW, quoting reference number 200/79.

University of the Witwatersrand, Johannesburg Department of African Languages CHAIR OF AFRICAN LANGUAGES

Applications are invited for the above post in the Department of African Languages. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of the Witwatersrand, Johannesburg 2000, by 15th October 1983. Further details may be obtained on request.

Victoria University of Wellington New Zealand Department of Accountancy SENIOR LECTURER AND LECTURERS (2 POSTS)

Appointments are available for the above posts in the Department of Accountancy in the following areas:

TAXATION AND/OR FINANCIAL ACCOUNTING AND/OR COMMERCIAL LAW

Applicants should have an advanced degree in accounting or commerce, with relevant experience in teaching and research. They should also have a minimum of five years' experience in the field of accountancy.

For application forms and further details write to The Secretary, Victoria University of Wellington, P.O. Box 600, Wellington 614, New Zealand. Applicants should enclose a self-addressed, stamped envelope. Completed application forms should be returned by 17 October 1983. Previous applications for any of the above posts need not re-apply since their applications will be considered with any new ones received.

University of Hong Kong LECTURESHIP IN URBAN STUDIES/ GEOGRAPHY

Applications are invited for the above post in the Department of Urban Studies and Geography. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Hong Kong, Pokfulam, by 15th October 1983. Further details may be obtained on request.

University of Essex SENIOR RESEARCH OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Essex, Colchester, by 15th October 1983. Further details may be obtained on request.

University of Newcastle Upon Tyne Faculty of Engineering LECTURER IN OFFSHORE ENGINEERING

Applications are invited for the above post in the Faculty of Engineering. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Newcastle Upon Tyne, Newcastle, by 15th October 1983. Further details may be obtained on request.

University of London Addition Research Unit STATISTICIAN

Applications are invited for the above post in the Addition Research Unit. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of London, London, by 15th October 1983. Further details may be obtained on request.

University College of Swansea

Fixed-Term Lectures

Applications are invited for the above posts in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University College of Swansea, Swansea, by 15th October 1983. Further details may be obtained on request.

University of Surrey STAFF TUTOR IN YOUTH AND FURTHER EDUCATION

Applications are invited for the above post in the Department of Youth and Further Education. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Surrey, Surrey, by 15th October 1983. Further details may be obtained on request.

University of Essex SENIOR RESEARCH OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Essex, Colchester, by 15th October 1983. Further details may be obtained on request.

University of Newcastle Upon Tyne Faculty of Engineering LECTURER IN OFFSHORE ENGINEERING

Applications are invited for the above post in the Faculty of Engineering. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Newcastle Upon Tyne, Newcastle, by 15th October 1983. Further details may be obtained on request.

University of London Addition Research Unit STATISTICIAN

Applications are invited for the above post in the Addition Research Unit. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of London, London, by 15th October 1983. Further details may be obtained on request.

Universities continued

University of Glasgow GARDINER CHAIR OF BIOCHEMISTRY

Applications are invited for the above post in the Department of Biochemistry. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Glasgow, Glasgow, by 15th October 1983. Further details may be obtained on request.

The University of Leeds PREDOCTORAL RESEARCH ASSISTANT

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Leeds, Leeds, by 15th October 1983. Further details may be obtained on request.

University of Essex SENIOR RESEARCH OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Essex, Colchester, by 15th October 1983. Further details may be obtained on request.

University of Edinburgh University of Cambridge

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Edinburgh, Edinburgh, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

The University of Leeds PREDOCTORAL RESEARCH ASSISTANT

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Leeds, Leeds, by 15th October 1983. Further details may be obtained on request.

University of Bristol Department of Politics LECTURER IN POLITICS

Applications are invited for the above post in the Department of Politics. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bristol, Bristol, by 15th October 1983. Further details may be obtained on request.

University of Essex SENIOR RESEARCH OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Essex, Colchester, by 15th October 1983. Further details may be obtained on request.

University of Edinburgh University of Cambridge

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Edinburgh, Edinburgh, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Oxford CHICHELE PROFESSORSHIP OF MEDIEVAL HISTORY

The election is intended to provide a permanent post for a senior scholar in the field of medieval history. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Oxford, Oxford, by 15th October 1983. Further details may be obtained on request.

University of Oxford ADMINISTRATIVE OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Oxford, Oxford, by 15th October 1983. Further details may be obtained on request.

School of Occupational Therapy St. Andrew's Hospital Northampton NN1 3DO

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, St. Andrew's Hospital, Northampton, by 15th October 1983. Further details may be obtained on request.

University of Bristol Department of Politics LECTURER IN POLITICS

Applications are invited for the above post in the Department of Politics. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bristol, Bristol, by 15th October 1983. Further details may be obtained on request.

University of Essex SENIOR RESEARCH OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Essex, Colchester, by 15th October 1983. Further details may be obtained on request.

University of Edinburgh University of Cambridge

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Edinburgh, Edinburgh, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Oxford CHICHELE PROFESSORSHIP OF MEDIEVAL HISTORY

The election is intended to provide a permanent post for a senior scholar in the field of medieval history. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Oxford, Oxford, by 15th October 1983. Further details may be obtained on request.

University of Oxford ADMINISTRATIVE OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Oxford, Oxford, by 15th October 1983. Further details may be obtained on request.

School of Occupational Therapy St. Andrew's Hospital Northampton NN1 3DO

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, St. Andrew's Hospital, Northampton, by 15th October 1983. Further details may be obtained on request.

University of Bristol Department of Politics LECTURER IN POLITICS

Applications are invited for the above post in the Department of Politics. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bristol, Bristol, by 15th October 1983. Further details may be obtained on request.

University of Essex SENIOR RESEARCH OFFICER

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Essex, Colchester, by 15th October 1983. Further details may be obtained on request.

University of Edinburgh University of Cambridge

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Edinburgh, Edinburgh, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

University of Bradford LECTURESHIP IN PHARMACEUTICAL TECHNOLOGY

Applications are invited for the above post in the School of Pharmacy. The successful candidate will be expected to give lectures and supervise research.

Applications should be sent to the Secretary, University of Bradford, Bradford, by 15th October 1983. Further details may be obtained on request.

PLYMOUTH POLYTECHNIC The Plymouth Business School

Applications are invited for the above post in the Department of Social Sciences. The successful candidate will be expected to give lectures and supervise research.

Teaching Company Associates R36

Applications are invited by Huddersfield Polytechnic for two posts as Teaching Company Associates from good honours graduates in mechanical or production engineering or related disciplines, to join the SERC/DOT Teaching Company Scheme established between The Polytechnic and Robert Stephenson & Sons Limited, Huddersfield, a successful international company engaged in design, manufacture and marketing of advanced specialist components to the diesel engine industry.

The successful candidates will be associated with the application of new technology and systems within the manufacturing area of the company and this calls for ambitious engineering graduates preferably with industrial experience who have good communication skills and an innovative approach to problem solving. Some knowledge of Robotics, Flexible Manufacturing Systems or Manufacturing Resource Planning (MRP) would be an added advantage.

The appointments are for two years with a salary in the range £7,215-£8,091, although in exceptional circumstances this will be enhanced by the Company. The starting date for the programme is expected to be October/November 1983.

Application forms (to be returned within 14 days of the appearance of this advertisement) and further details from the Personnel Dept, The Polytechnic, Queensgate, Huddersfield HD1 3DH, tel 0484-22282 ext 2224.

HOLSET HUDDERSFIELD POLYTECHNIC

DUNDEE COLLEGE OF TECHNOLOGY DEPARTMENT OF MOLECULAR & LIFE SCIENCES

SENIOR LECTURER IN NURSING STUDIES

(Health Visiting and District Nursing)

Applicants must be registered both as Health Visitor and District Nurse Tutors; they should preferably be graduates, also. The person appointed will have had relevant teaching and clinical experience and, in addition to undertaking appropriate teaching and research duties, will be required to lead the development of primary care courses within the college.

LECTURERSHIP IN NURSING STUDIES/HEALTH VISITING

Applicants must be registered as Health Visitor Tutors, have recent teaching and appropriate clinical experience and should preferably be graduates. Possession of the District Nursing Certificate would be an additional advantage. The person appointed will be required to teach in an area of primary care (e.g. Health Visiting, District Nursing) and on the BSc Nursing Degree courses.

Salary Scales: Senior Lectureship - £12,225-£13,572 (Bar) - £15,411; Lectureship - £8,319-£12,225 (Bar) - £13,125.

Initial placing on the scale will be dependent upon approved previous experience. Financial assistance towards the cost of removal expenses may be payable.

Further particulars and application forms obtainable from the Personnel Office, Dundee College of Technology, Bell Street, Dundee DD1 1JG, with whom applications should be sent.

Thames Polytechnic School of Social Sciences

RESEARCH ASSISTANT IN ECONOMICS

Applications are invited for the post of Research Assistant in the School of Social Sciences. The successful candidate will be responsible for research and teaching duties. The post is full-time and requires a minimum of a BSc in Economics or equivalent.

Salary Scale: Research Assistant - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Administration

The University of Aston in Birmingham

ADMINISTRATIVE ASSISTANT - REGISTRY

Applications are invited from graduates with good honours degrees for a post of Administrative Assistant in the Registry. The successful candidate will be responsible for administrative duties in the Registry.

The post will involve a full-time commitment and requires a minimum of a BSc in a relevant discipline.

Salary Scale: Administrative Assistant - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of Aston, Aston Triangle, Birmingham B4 7ET, with whom applications should be sent.

Administration continued

National Society For Epilepsy

Chief of Centre for Epilepsy, Chelmsford St. Peter, Buckinghamshire

EDUCATION & INFORMATION OFFICER

Applications are invited from graduates with good honours degrees for a post of Chief of Centre for Epilepsy. The successful candidate will be responsible for the education and information work of the Society.

The post will involve a full-time commitment and requires a minimum of a BSc in a relevant discipline.

Salary Scale: Chief of Centre for Epilepsy - £12,000-£13,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, National Society For Epilepsy, Chelmsford St. Peter, Buckinghamshire, with whom applications should be sent.

Administration continued

CENTRAL COUNCIL FOR EDUCATION & TRAINING IN SOCIAL WORK

SOCIAL WORK EDUCATION ADVISERS

To £16,109 p.a.

The Council wishes to recruit four Social Work Education Advisers, two in its Central Office in London and two in regional offices based at Rugby and London.

The Central Office posts will be concerned, respectively, with the processes, development, implementation, monitoring and recognition of CCETSW's training programmes and with the development, implementation and monitoring of training policies in the fields of mentally handicapped people and mental health services.

The regional office posts involve a wide range of work, including liaison with local authorities and other employers, universities and colleges and assisting in the promotion of training for staff in the personal social services. One of these posts is in the London and South East region, based in London and the other in Rugby which covers the Midland counties.

Candidates should be qualified social workers with experience of social work practice and of teaching in institutions of higher or further education or in providing training for staff in social work agencies. Other kinds of relevant experience and qualifications will be considered. Salary on scale £9,875 to £14,975 p.a. plus London Weighting Allowance of £1,134 p.a. payable for London based appointments.

Further details of these appointments and application forms are available from the Personnel Section CCETSW, Derbyshire House, 51, Chancery Street, London WC1H 8AD. Tel: 01-278 2459 Ext. 28.

Completed application forms should be returned by 7th October 1983.

CCETSW

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

Salary Scale: Information Officer - £5,500-£6,500 p.a.

Further particulars and application forms obtainable from the Personnel Office, Thames Polytechnic, Watlington Road, Watlington, Oxford OX1 2JG, with whom applications should be sent.

There is a contributory pension scheme.

The University of the West Indies

ACCOUNTANT / ASSISTANT ACCOUNTANT IN THE BURSARY

Applications are invited for the post of Accountant / Assistant Accountant in the Bursary.

The successful candidate will be responsible for the financial management of the University.

The post is full-time and requires a minimum of a BSc in Accounting or equivalent.

Salary Scale: Accountant - £12,000-£13,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Research & Studentships

Research Assistant

ASSISTANT ACCOUNTANT IN THE BURSARY

Applications are invited for the post of Research Assistant in the Bursary.

The successful candidate will be responsible for the financial management of the University.

The post is full-time and requires a minimum of a BSc in Accounting or equivalent.

Salary Scale: Research Assistant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application forms obtainable from the Personnel Office, The University of the West Indies, with whom applications should be sent.

There is a contributory pension scheme.

Hours: 35 hours per week, including overtime.

Application form and details from the Personnel Office, The University of the West Indies, with whom applications should be sent.

Salary Scale: Assistant Accountant - £8,000-£9,000 p.a.

Further particulars and application

Overseas continued



NANYANG TECHNOLOGICAL INSTITUTE

CAREER OPPORTUNITIES IN SINGAPORE FOR ENGINEERING PROFESSIONALS

Career opportunities exist in Singapore for engineering professionals who like teaching and one looking for challenging jobs in tertiary institutions.

The Nanyang Technological Institute, fully supported by the Government of Singapore, offers engineering degree courses with an emphasis on engineering applications. It is one of the two institutions in Singapore that provide engineering education at the university level.

There are vacancies in the Institute's three schools of engineering. Candidates specialising in the following areas are particularly needed:

Civil & Structural Engineering

Structural and construction engineering
Water resources and environmental engineering
Geotechnical and transportation engineering
Engineering mathematics and computing
Engineering economics and accounting
Surveying and mapping

Electrical & Electronic Engineering

Electronics/communications design
Digital control systems
Control and instrumentation
Computer engineering software and hardware
Data base/data communication technology
Computer aided design, manufacture and testing

Mechanical & Production Engineering

Machine technology
Engineering production
Mechanical design
Mechanical engineering

QUALIFICATIONS

Candidates should have —
(a) Higher degree in relevant fields of engineering, and
(b) Sound professional/teaching experience in engineering.

ANNUAL SALARIES	from	to
Professor	S\$88,830	S\$130,131
Associate Professor	S\$79,734	S\$108,822
Senior Lecturer	S\$63,227	S\$ 81,017
Lecturer	S\$48,242	S\$ 65,787

(£12 = S\$3.20)

The level of appointment and the point of entry will depend on candidates' qualifications and experience.

In addition to the salary the Institute contributes 23% of the staff member's monthly salary towards the Central Provident Fund Scheme to which the staff member also contributes 22% of his monthly salary subject to a maximum of S\$690. The amount standing to the credit of the staff, can be withdrawn when he reaches the age of 55 years or when drawn in income tax savings.

The Institute provides housing at a highly subsidised rate. Other benefits include: car loan, education allowance, gratuity, medical benefits, annual leave and passage allowance.

The Institute encourages its staff members to undertake outside consulting work of a specialist nature. Staff members are permitted to earn and retain such consultation fees up to 50% of their annual gross salaries.

Candidates wishing to be considered should write to —

The Registrar
NANYANG TECHNOLOGICAL INSTITUTE
Upper Jurong Road, Singapore 2263

giving their curriculum vitae and the names and addresses of three referees.



UNIVERSITY OF CAPE TOWN Department of Geology Temporary Teaching Assistant

Applications are invited for the above post in the Department of Geology for appointment from 1 January 1984 or no later than 1 February.

The successful applicant will be responsible for teaching an introductory semester course in Geology to Civil Engineering students and will assist with other undergraduate problems and field trips. The post is a temporary one and is subject to the approval of the Department.

The post is suitable for an honours graduate (or MSc or PhD) who also wishes to pursue research interests in Geology. The appointment is for one year but can be renewed and is subject to a candidate who wishes to register for an MSc or PhD degree in the Department.

The salary is in the range of R2 333 to R10 317 per annum depending on qualifications and experience.

Applications, in writing, with a full curriculum vitae and grading of at least two acceptable referees, must be made to Professor A. H. Hall, Head of Department of Geology, University of Cape Town, Private Bag, Rondebosch, 7700, South Africa. The closing date for applications is 31 October 1983.

The University's policy is not to discriminate on the grounds of race, colour, sex, age, or religion in the implementation of this policy is enforceable on 1984.

AUSTRALIA The University of Wollongong

Equality of employment opportunity is University policy. Applications are invited from suitably qualified and experienced persons for the following posts. The University reserves the right to fill any advertised position by invitation.

DEPARTMENT OF COMPUTING SCIENCE LECTURER OR SENIOR LECTURER (Tenurable or Limited Term position)

Preference will be given to applicants with experience in one or more of the following fields: the application of predicate calculus to computer programming; database theory, development and application; operating systems; graphics.

The Computing Science Laboratory contains 60 terminals (including two Parkview 220 computers under UNIX). The system is closely coupled via dual-port disks and locally connected via I/O ports. The central computer is a SPERRY 1100/60. Both systems are available for teaching and research. A microcomputer, a robot and a computer-aided learning laboratory are also available.

Appointment may be made either to a tenurable position or to a limited term position for 2 to 4 years.

DEPARTMENT OF PSYCHOLOGY LECTURER OR SENIOR LECTURER (Tenurable position 1981/82)

Clinical, community or counselling psychologists are invited to apply. The successful applicant will teach and conduct research in experimental, personality and social psychology and graduate (M.A. in Applied Psychology) as well as undertake and supervise research in experience-based psychology.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

GARYOUNIS UNIVERSITY BENGHAZI, LIBYA A.R. TEACHING POSTS

Required for the Academic year starting October, 1983.

DENTISTRY

All specialists, in particular Restorative Dentistry (conservative, endodontic, crown and bridge, orthodontics, prosthodontics and periodontics).
Apply with C.V.

COMPUTER SCIENCE

Applications are invited for Teaching position starting September 1983.

Applicants must have Ph.D.; commitment to teaching research in computer science. All areas of specialisation in computer science will be considered.

Salary Scale 6285 to 8720 L.D. p.e. depending on qualifications and experience.

Send resume with names of three referees.

ENGINEERING

Teaching positions in HE; IE; and ME, departments at the University in CLA; SIC; U.E. Applied Statistics; Applied O.R. and Manufacturing Engineering. Candidates with P.T.E. are preferred programme (120 Students) covers all Areas of IE with newly possibility of financing.

PO T PO IT DN will be filled upon availability of accepted candidates.

Salary Scale 6285-8720 L.O. Apply with C.V. and names of three referees.

Approximate current rate of exchange 1 L.D. = £2.15.

Fringe Benefits include:

- Generous Clinical Allowance (Dentistry)
- Free Accommodation plus furniture allowance.
- Free Air travel for employee and family.
- 2 months salary as a bonus for each year of service.
- Free leave travel for employee and family.

ZOOLOGY DEPARTMENT

Applications are invited from suitably qualified candidates for the following posts:

- Chordate Biology (Ichthyology; HA Herpetology; Ornithology; Mammalogy).
- Invertebrate Biology and Parasitology.
- Cell Biology, Molecular and Radiation Biology.
- Insect Physiology; Insect Ecology; Insect Toxicology; Medical and Veterinary Entomology.

Appointments are for two years initially, with possibility of extension by mutual agreement. Shorter periods may be considered to accommodate senior academics.

Benefits include:

- Transportation costs for appointee and family, contribution to living expenses; terminal pay gratuity, etc.
- Salary Scale: Professor L.D. 8840; Associate Prof. L.D. 7600; Assistant Prof. L.D. 6840; Lecturer L.O. 6240; Current rate of Exchange 1 L.D. = U.S. \$3.37.

The Department is particularly interested in those who wish to contribute to a strong teaching team at under and postgraduate level.

Benghazi is located on the Mediterranean coast, and has pleasant climate.

Applications with C.V. and names of three referees.

Appointments may be made at any time, particularly to those available immediately.

ENGLISH LANGUAGE AND LITERATURE

Vacancies for teaching staff, Department of English Language and Literature starting September, 1983.

Applicants holding M.A. or Ph.D., with university teaching experience will be preferred.

Salary scales:

- Professor 8840 L.O.
- Associate Professor 7600 L.D.
- Assistant Professor 6840 L.D.
- Lecturer 6240 L.D.
- Assistant Lecturer 6285 L.D.

Other benefits include: —
Free return air tickets; 45 days paid leave annually; free medical care; Furnished Accommodation; Two months salary for each year of service thereafter; 20% of salary real baggage allowance on flight arrival and final departure.

Applications with non-returnable copies of qualifications and experience, together with names of three referees.

Please apply to

The Cultural Attaché

88 Prince's Gate

London, SW7.

TH93

Librarians

University of Newcastle Upon Tyne

Department of Fine Art

SENIOR LIBRARY ASSISTANT

Applications are invited for the above post in the Department of Fine Art Library. The successful applicant will be responsible for the day-to-day running of the library and will assist with other undergraduate problems and field trips. The post is a temporary one and is subject to the approval of the Department.

The post is suitable for an honours graduate (or MSc or PhD) who also wishes to pursue research interests in Geology. The appointment is for one year but can be renewed and is subject to a candidate who wishes to register for an MSc or PhD degree in the Department.

The salary is in the range of R2 333 to R10 317 per annum depending on qualifications and experience.

Applications, in writing, with a full curriculum vitae and grading of at least two acceptable referees, must be made to Professor A. H. Hall, Head of Department of Geology, University of Cape Town, Private Bag, Rondebosch, 7700, South Africa. The closing date for applications is 31 October 1983.

The University's policy is not to discriminate on the grounds of race, colour, sex, age, or religion in the implementation of this policy is enforceable on 1984.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an offer of appointment for an alternative type of appointment.

REMEMBER

Don's diary

Monday

A quiet start; no mail as yet, the college postperson is off sick and the senior administrative officer who is covering for her is in a meeting. Memo to self, don't learn to drive. I fend off three reps of careers publications who want us to advertise with them - I explain about the minimal budget.

I agree to one, who wants copy by the weekend. I explain about three week delays pending local authority approval of the spending of public money. They're off saying it has been nice to talk to me! I am gradually beginning to tell apart their ever so bright home counties voices. At least in this job I've learned to say "no".

I get a panic - crisis, dash, leave everything call from a colleague at our information shop in the city library. The display of student work accompanying our advice-giving activities has been vandalized. Three chocolate rabbits contributed by the school of bakery have had their ears neatly bitten off. Someone is going to be very sick on cooking chocolate and confectioner's vanilla. I go down to the library and remove the remains, which are attracting the kind of publicity we don't need.

Tuesday

Bedlam: we've organized a phone-in follow-up to an ad in the local press urging mature women to prepare for returning to employment. Unfortunately the extension number we gave has since been disconnected. The new one not yet connected and this morning the switchboard operator has been sick. I take some of her calls and can see why. I perfect a mollifying tone of voice.

Must want identifying T-shirts for a Barbican performance. Can the public relations budget spare £40? Three saplings on the approach road have been snapped off by the wind or vandals and need to be banded or replaced quickly.

I consider the demise of a goldfish on college premises (being harboured for an overseas student obliged to make a golden return journey home) - not really worthy of a press release. Seven hundred copies of the latest issue of the college news sheet require stapling prior to distribution.

Extension work on the college library has unfortunately covered up the only sign identifying the neighbouring teaching block and what am I going to do about it? As it's the week prior to enrolment, I advance it to the top of my list of "things to do yesterday" and dash off to local radio to do an item on educational opportunities for adults in the city this autumn.

I am mistakenly identified as two other people, but eventually go live and of the flat I've rehearsed on the way there manage to mention basic computing, Punjabi, beekeeping and astrology. I come away frustrated as usual of only being given three minutes on the air.

Wednesday

News of student successes at degree level comes in the mail, a useful feedback service from higher education. I recognize one I taught at A level before I accepted this particular staff development opportunity. I dimly recall thinking it would be nice to press lunches and telly appearances. Huh!

I check a story out about an A level success - three B grades in sciences in under two years of study after a shaky start elsewhere and going on to a degree course in pharmacy. I notice in passing the number of female students who've done well in behavioural sciences.

More crisis phone calls - on entire set of exhibition materials has gone missing.

ing. I pass that problem on, having learned from a colleague the useful sentence: "I can leave that with you now, can I?" Someone points out inaccuracies in the prospectus, one of them my own course. I forbear to advocate a more sophisticated system of proof reading, knowing I'll get the job.

A request to talk to a Youth Training Scheme induction course is accepted with alacrity until I remember I shall be at the staff induction course, enrolling my own students and advising at the information shop at that time already. Whoever said time was infinitely expandable wasn't a PR officer!

Thursday

A parent calls in to thank us for helping her daughter find an alternative to university after failing A levels. I commend in turn the city's adult advisory service and careers officers who have been working with us. A staff member compliments the special adult education newspaper we put out this summer.

While I am basking in this admittedly reflected glory one of the departmental clerks drops an irate phone call from a firm's training officer, unable to find someone he needed during the holidays. He told us that if we were in business we wouldn't be. I have to agree, but then we aren't; or are we?

I hide from the telephone and spend the rest of the day writing the item on publicity and public relations for the annual report, deploring our old fashioned supermarket orientation and urging greater involvement by all concerned parties. Staff development never know a dull moment!

Friday

Perhaps this will be a quieter day? Time to check over various items for the next college news sheet - are the latest Further Education Unit documents in the library yet or is it? What exactly were the award the business studies people won for the design of their certificate of management studies course?

I must thank those who staffed the information shops in the holidays, provided the display items and helped put up the posters. I insert an item asking for volunteers to report the affairs of their departments with a view to news sheet and press coverage.

I go through the folder of follow-up queries from the information shops: one of the pictures in the fine art section of the display of student work features a man and his dog sitting on a bench - the man has seen it, recognized himself and wants to buy it. Must make something of that.

Five pm. A flurry of late requests: can we take a couple of school pupils on a period of study experience in art and design? Will I write up details of our open access courses for an equal opportunities group? Please, can the staff car park be newly signposted and how about ringing the local radio station to push slow enrolment courses?

I am about to start on all this when someone asks when I intend to update the staff handbook. I decide Monday will do for the brave new world, put everything in my brief case and go home well intentioned, nothing but secret pleasure over enrolment posters musing on staff development opportunities.

Anne Castling

The author is public relations officer at Newcastle College of Arts and Technology.

My children have recently become masters at making a group, which they call "yah" people. I am uncertain of the origin of this term but assume that it derives from the fact that members of this group say "yah" instead of "yes". They are further characterized, according to my children and their friends, by wearing leather-thonged sandals, eating lentils, being "into" psychotherapy and following occupations such as social work. If they have small children they dress them in dungarees with Cam-paign for Nuclear Disarmament and anti-nuclear power badges pinned to them if they are old enough - they were hippies in the golden days of the late 1960s. "You were a hippy once," my children accuse me in a tone which indicates a mixture of poking fun and denial. "Not exactly," I reply defensively, to which they draw attention to the moth-eaten, smelly, embroidered velvet, Bedouin caftan still hanging in my cupboard. (Perhaps my reluctance to throw it away is because it does symbolize an era.) But while accusing me of a hippy past, which to them is as past as crew cuts, boned bras and white weddings were to my generation, they have not yet designated me a yah person.

I fear it may happen soon as the yah tendencies, which are already present, become more manifest. Secretly soaking pulses in the middle of the night, I wonder if I dare reveal that I have resorted to homeopathic remedies, tried acupuncture and thought about psychotherapy. There are plenty of Indian shirts and thonged sandals in my wardrobe and to my daughter's disgust I bought another pair of these sandals only a few weeks ago. Vegetarian restaurants have growing appeal and being forced to give up my yogas class as a result of a change of job has led to a permanent stiff neck.

Temporary relief has been found courtesy of the Railway Workers Sanatorium in Hangzhou where I was given a traditional Chinese neck massage. I am now looking for a Chinese masseur in London. (Genuine letters only please.) Though the sight of a plate of carefully weighed dried lizards, centipedes and eels ready to be ground up and taken as powder or added to wine did cast some doubts in my mind as to the value of all Chinese

Reminiscences and regrets, post-Robbins

August to familiarize myself again with what was going on in common rooms around the country and in the corridors of Elizabeth House what should I find but an exhaustive analysis by Peter Scott of the achievements of Robbins. This was where I came in. How will I remember that report. My own dog-eared copy, carried around the country stands on the shelf, although the reports many years ago.

I don't remember any of those conference speeches. The momentum given to the expansion of student places was enormous. To have expanded from 97,000 full-time places in 1957/58 to 309,000 at the latest count is quite an achievement.

Not surprisingly (particularly in view of Peter Scott's comment that Robbins' "Background of culture and social revision") I strongly supported that some extent, of greater equality within the traditional goals of the university. As Scott wrote: "The thrust to equality was most obviously expressed through improved access and faster expansion."

It is surprising that Mrs Thatcher's Conservative have not pursued the reverse arguments more vigorously to justify their cuts in higher education expenditure. No doubt this is in large measure because the style, status and standards of the new universities, combined with their older brethren have over higher education.

Maybe we should be thankful for what we have. But I very much regret that some of the more radical reforms of the 1960s were not introduced. Robbins' principle, "All young persons qualified by ability and attainment to pursue a full-time course in higher

The ethnic life of the Yah people



Tessa Blackstone

little bottle, so that those who travel with half the contents of their medicine cabinets could greatly lighten their suitcases with this alternative.

Eschewing ordinary English food of the meat and two veg and apple tart variety is another characteristic. Wok sales are booming in Hampstead and all kinds of Indian spices can be found in smart grocers in small country towns to serve the needs of those with country cottages, which the better off members of the yah group frequently possess. Thus the relish with which I found myself attacking every conceivable Chinese dish put in front of me when visiting China recently was yet another sign of moving towards yah status.

One memorable meal revealed, however, that conversion is not yet complete. After the usual Chinese *hors d'oeuvre* picked with chop-sticks from a wide range of dishes in the centre of the table mostly good, though I draw the line at salty eggs and pickled eggs, the main courses began to be served. Nothing remarkable for two or three hours. Then came a dish looking like a frying vegetable in batter. The assumption that this was what it was proved false. Indignantly taking a large bite, there followed a horrible crunching noise and a rapid attempt to eject it without actually spitting it out, a difficult feat to perform for those who are as eck-handed as I am with

chop-sticks. A glance round the table indicated that the Chinese were in trouble. So politesse dictated another bite, which only produced more crunching and scrunching and the impression of the unsuccessful mastication of tiny bones. Could this be the bestor rat described as a local delicacy in the guide book? Further prodding of the remained on my plate as dawn came on the centre of the table revealed the unmistakable shape of a whole rat, complete with head and beak. "See row," replied the interpreter in a whispered query. Next course: marinated jellyfish, followed by fish fungus and lotus seed soup. The latter, it apparently claimed leads to longevity. I would opt for an earlier end to life.

The Labour Party has throngs of yah people among its middle-class members. Curiously, however, all the recent contenders for the leadership are peculiarly non-yah especially Menzies and Heffer and Hattersley. The thought either of them in Indian sandals and ethnic shirt is about as far away from reality as Harold Macmillan in the kind of get-up. The yah tradition however, goes back some way to a British socialist. In its early days the Fabian Society and some of its members had links with the Simple Life, whose creed and practices were remarkably similar to those of many contemporary yah types. Indeed the Beatrice Webb house tradition of eurythmics before breakfast and tea for it still lingers on among some of the society's membership.

Higher education also has its share of yah people among its employees. Some might say that it is because there are so many academics with time on their hands to make their own money and do their own weaving. Others might argue that it indicates that the highly educated who define themselves to providing higher education for others are also more conscious of ecological problems, of the importance of diet and exercise in achieving good health and of the greater respect and practicality of certain kind of clothes. If anything, the yah tendency to wear the same old, same old certain styles of life become a risk.

the sense that they are valued for their own sake rather than for their benefits and when they acquire a significance beyond their importance and are beyond the central political and ideological issues of today, they become questionable. It is in these circumstances that my children's mockery and derision is justified.

THE TIMES HIGHER EDUCATION SUPPLEMENT 23.9.83

LETTERS TO THE EDITOR

Relations between town and gown

Sir, - While sympathising with the general tenor of many of Colin Radford's comments in his article "Within These Ivory Walls" (THES, September 9), I am surprised that he is so out of touch with developments in his own institution. "History day schools", commendable as they are, form a very small proportion of the 350 courses which the school of continuing education organizes countrywide during any one academic year, even a small proportion of the day school programme of 30 to 40 courses of this type offered in each academic year. Regular feedback information gives no credence to the suggestion that teaching staff are not "properly prepared"; if that was so, classes would soon fade away and our rate of cancellations would be much higher than it is.

Of course, "success" is a subjective criterion, but the general reaction in the county of Kent seems to have been almost wholly favourable to the ways in which this university has "opened its doors" to the public, not only through continuing education, but in additional ways which will surely be pointed up by other members of this university. It should also be emphasized that the part-time degree/diploma programme, touched on so lightly by your correspondent, is now registering something approaching 200 students a year and this figure will rise sharply when our Tonbridge centre, financed by the help of the University Grants Committee and the Kent Education Committee, offers a similar range of courses from October 1984.

There was certainly a time when town/gown relations in Canterbury were poor, to say the least of it, but this has changed radically for the better over the years and it is difficult to see how this university could go much further down this road without distorting its purpose altogether. One looks forward to Dr Radford's new interest in this university to bring down the height of the "ivory walls" to one which can easily be scaled by a wider cross-section of the general public.

Yours faithfully,
Dr A. T. BARBROOK,
School of Continuing Education,
University of Kent,
Canterbury.

Sir, - I would like to make some comments in defence of Colin Radford's article on town/gown relations. In this apparently "seriously ignorant" article (F. E. Bell, Letters, September 16) Dr Radford claimed that the buildings of Bristol University were "dead after 4.30pm" when he was there (being a reader in philosophy we may assume this was some time ago), and cited this as symptomatic of a town/gown divide that has become

engrained within the social consciousness.

While we have now been given reasons for believing that the department of extramural studies at Bristol University is extremely doing an excellent job (F. W. Walthew, Letters, September 16), this is unfortunately not the case in many other comparable institutions. Furthermore, in fairness to Dr Radford, it should be pointed out that while many universities open their doors to local townspeople by way of such departments, widespread university response to "locals" within such universities is often one of patronizing tolerance.

As an example of this I cite Durham University (where I was a research student) which has an excellent department of extramural studies, but whose own university students' union refuses to allow townsfolk to attend concerts or social events within the new union complex. In this area of high deprivation and unemployment the contrast between town and gown can only be further reinforced by such exclusive attitudes - attitudes which, I suggest, have historical roots in the "empty buildings" of Radford's research days. Yours faithfully,

BELENDIA RICHARDS,
Department of Philosophy,
University College,
London.

Transport studies

Sir, - I refer to your article (THES, September 2) "Demand accelerates for transport studies" which mentioned certain undergraduate courses in transport studies.

The impression given by the article was that here at Plymouth Polytechnic we are concerned only with shipping. It is a fact that we have a Council for National Academic Awards BSc (Honours) degree course in nautical studies with an option in maritime transport and this has been very popular with students. It is also a fact that we have been running

This is only part of the story, however, because for the past eight years transport studies has been offered as an option in the polytechnic's BSc (Honours) degree in combined studies. In more recent years this has been developed into a major pathway in the degree and undoubtedly has been a great success both from an academic sense and the response from industry. Indeed close links have been established with organizations concerned with road, rail, sea and air transport in the West Country and research is being carried out in all these areas in the polytechnic. The commitment of the polytechnic is to transport studies in general as it is taught in the combined studies degree so that graduates are prepared for entering any sector of the transport industry.

Developing undergraduate courses in transport studies has been a long hard haul due largely to the conflicting views held by academics as to whether transport was more appropriately a postgraduate or undergraduate subject. I hope that you mentioned in your article, Dr Radford, the pioneering efforts of the Chartered Institute of Transport, the Organization of Teachers of Transport Studies and academic staff in departments like my own, I believe that transport studies now has a firm foundation as an undergraduate subject and the response from students and industry supports this view.

Yours faithfully,
C. A. RICH,
Extra Master,
Head of Department,
Shipping & Transport.

Sir, - Your comment about our response to the National Advisory Body proposals (THES, September 16) is somewhat misleading. The proposals merely consolidate an expansion that has already occurred and we are to maintain, in real terms, a small cut in budget. There is relief and satisfaction that the last of the polytechnics to be created has been permitted to stabilize at normal size and at normal cost levels.

Yours faithfully,
ERIC ROBINSON,
Preston Polytechnic.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them if necessary.

Seduction by a glint of gold

Sir - One dare not assert that the top people (the cream) of our great institutions of industry, learning and governance can be bought, but it is a matter of common observation that their vision may be sharply focused by the glint of gold.

Thus your reports of Dr Rohin Nicholson's seminar for top people and of Sir Keith Joseph's essay for the University Grants Committee (THES, September 16) engender the fear that once again clean-cut logical solutions will be proposed for the problems of industry and the universities. Thus university science will assist industry and universities will divide into three leagues; the friends of the top people; the worthy workers; the teaching institutes.

May one suggest that such clarity of vision on immediate issues is not necessarily of advantage in the long term?

Universities are about education, not merely about research and development for the military-industrial complex. We hear demands that technologists should be exposed to the realities of the commercial world and that the humanist should have a dose of numeracy, but what about technologists leaving sight of the enduring universe of the arts? The dichotomy between numbers and hand-waving is well known. Less easily accepted is the possibility that when numbers come into the picture, understanding departs.

Is it time to wave a few hands? For one thing, a too easy acceptance of the technology promotion programme may damage the position of university scholarship in the humane and arts areas.

Also a great disservice to education would ensue, if universities were to become purely teaching institutes. The essence of the traditional university approach in the UK has been to transcend teaching and research. What is not an open collection of approach to the collection and collation of facts, (that is, a "research" approach). How can you ask a teacher to inculcate a research approach if you deny him the practice of research? HOWARD AXON
253 Didsbury Road,
Heaton Mersey,
Stockport.

Arms aims

Sir, - Robert Moore (THES Letters, September 16) expresses interest in knowing whether the Academic Council for Peace and Freedom "is a genuine peace organization or simply anti-unilateralist."

As the name of our organization suggests we are "simply" neither. Our object is not to promote disarmament as such but to discuss what may be the proper means for preserving the peace and freedom of this nation.

What links our members is a profound scepticism about whether the sort of measures of one-sided disarmament which Robert Moore apparently favours would be conducive to the preservation of either national freedom or international peace.

Yours faithfully,
DAVID J. LEVY,
Secretary,
Academic Council for Peace and Freedom.

NAB proposals

Sir, - Your comment about our response to the National Advisory Body proposals (THES, September 16) is somewhat misleading. The proposals merely consolidate an expansion that has already occurred and we are to maintain, in real terms, a small cut in budget. There is relief and satisfaction that the last of the polytechnics to be created has been permitted to stabilize at normal size and at normal cost levels.

Yours faithfully,
ERIC ROBINSON,
Preston Polytechnic.

Exchanging ideas for tolerance

F. B. Singleton on the Dubrovnik Inter-University Centre's tenth anniversary

The Inter-University Centre for Post Graduate Studies which has just celebrated its tenth anniversary, is a remarkable venture in international academic co-operation which could only flourish in a country like Yugoslavia. The initiative was taken by the University of Zagreb, which provides the building in which the centre is housed, the secretarial and technical staff and publishes the courses. The rest of the finance comes from the subscriptions of the 137 affiliated universities and the courses are self-financing, often with help from foundations such as Volkswagen, Siemens and Ford.

To gain approval from the council those wishing to promote courses have to meet a few simple rules, the most important of which is that the course directors must include representatives from at least two different countries, so that international cooperation is built into the structure from the beginning. Interdisciplinary courses are favoured, but there is no bar on highly specialized mono-disciplinary topics - for example, international law, cancer, lacer, disposal of solid wastes, the history of Dubrovnik.

However, the main emphasis has been on the social sciences and philosophy, with topics such as Nietzsche, migration and community relations, Mediterranean studies, industrial relations and European security. Eminent scholars who have participated include Werner Heisenberg, Monica Partridge, Henrik von Wright, Jürgen Habermas, Jeanne Hersch, Charles Taylor and Mikhail Markovic.

Although there have been rumblings of disapproval occasionally from some elements in Yugoslavia, especially from Serbia during the period when the independent minded Praxis group, grade University, the academic tradition of the centre has been maintained. It is a great tribute to the open-mindedness of the Yugoslav authorities that the UIC has been able to grow and flourish during periods of political and economic stress.

The Tenth Anniversary was celebrated by a series of seminars and lectures over a period of five days in early September on the theme of Interdisciplinary. The theme was introduced by Dr E. G. Edwards, former vice-chancellor of Bradford University. Other speakers included Dr Müller-Goldbach, a humanist philosopher from Oxford, a geographer from Bradford, minister from the Yugoslav government, radical "action researchers" from Denmark, Quakers from USA and an assortment of social scientists from Germany, Sweden and France. It would be difficult to find anywhere else in the world such a collection of academics from different social and political backgrounds who came together because they wanted to exchange ideas in an atmosphere of mutual respect and tolerance. It is regrettable that financial constraints prevented some of the third world members from sending representatives.

The centre provides the physical setting; the participants provide the intellectual stimulus. The city of Dubrovnik is an ideal location for this adventure. In international co-operation, its own architectural history is in itself a result of the blending of several currents in European culture. There was a full programme of concepts to provide refreshment after the day's discussions - from the Monteverdi Choir of Hamburg, the Dubrovnik Symphony Orchestra and the local folkloric ensemble. Then, if the participants tired of intellectual and cultural pursuits, it was always possible to immerse oneself in the warm Adriatic.

Peter Sedgwick

Sir, - Peter Sedgwick, who died in tragic circumstances in September 1983, was a magnificent and eloquent correspondent. We believe that his letters, if gathered together, would be a remarkable testimony to his times. They might also be profoundly educative, even politically inspiring, in showing how personal suffering can be transcended by no ironical self-awareness, and a passionate and truthful engagement with the lives of one's fellow beings. For this reason, we propose to publish them along with some of his other writings in a memorial volume. Letters and papers (preferably photocopies) should be sent to us at the address below:

Peter Sedgwick Memorial Volume,
Pluto Press,
The Works,
105a Torrington Avenue,
London NW5 2RX.

Maths research

Sir, - As part of the post-Cockcroft programme of research sponsored by the DES, the National Foundation for Educational Research is undertaking an national review of current practices in secondary schools to assess lower-attainers in mathematics.

The research team wishes to contact those who have been involved in developing, or are using, any forms of assessment of these pupils. We would be grateful if you would publicize this review and ask anyone having relevant information to get in touch with Moira Lavery-Callaghan at the NFER, Up-ton Park, Slough, Berks.

Yours faithfully,
Mrs M. LAVERY-CALLAGHAN,
Research Officer,
Mathematics Department.

Spoiled argument

Sir - What a pity Miles Scott had to spoil a good argument in his letter (THES, September 9) by quoting Andy MacMillan. This is rather like saying the MacDonalds to list the virtues of the Campbell. I am afraid like MacMillan to whom higher education means when water tells them what whisky is available in the restaurant in the Post Office Tower!

Yours faithfully,
JOHN DRUMMOND,
Strathclyde University.

Poly monopoly

Sir, - I am grateful to A. Saunders of the National Association for Art Education (THES, Letters August 24) for stating the actual situation concerning my charge that the Inner London Education Authority is operating a monopoly position vis-à-vis the National Association of Teachers in Further and Higher Education.

Alas, the simple truth of the actual situation for the staff at my college is that none of my colleagues teach art and design, and only one is a principal. It is in this respect that those of us who do not wish to be members of Nafte are presented with a monopoly.

Yours faithfully,
P. E. STRACHAN-TIMMS,
Association of Polytechnic Teachers,
SW London College.

Press movement

Sir, - The report on the Pressings Imprint from Glasgow University in the September 9 issue is interesting in that it is but one indication of a general movement. Since 1981 we have been producing a series of Scottish Papers in Germanic Studies by similar methods, enabling scholars to publish studies which a commercial publisher would be unlikely to take on and which students would be unlikely to afford.

The system depends, of course, on small overheads, no profit, unpaid editors (and sometimes designers), and on pump-priming or support from bodies such as the Carnegie Trust

In Scotland. Our universities have for some time had similar series in German alone (Hull, Warwick), and doubtless there are many parallels in other subjects.

We seem to have come full circle in printing history, given that the incunabula-producers of the fifteenth century were frequently writers, editors, marketers managers and even typesetters all at the same time.

Yours sincerely,
BRIAN MURDOCH,
Stirling University.
MARK WARD,
Glasgow University.